

ALABAMA ORIENTATION & MOBILITY TASK FORCE

Report

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ALABAMA ORIENTATION AND MOBILITY TASK FORCE
REPORT

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ALABAMA ORIENTATION AND MOBILITY TASK FORCE

GOAL STATEMENT

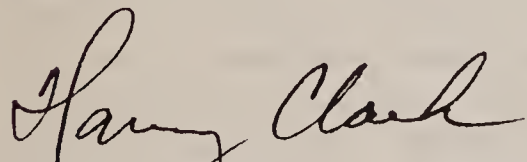
Develop and submit to agencies serving the blind and visually impaired in Alabama, recommendations for the provision of orientation and mobility services.

PREFACE

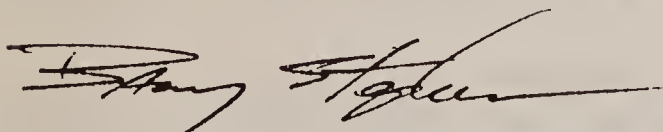
The editors of this report wish to thank each member of the task force for their input into what has resulted in a comprehensive look at problems and possible solutions toward providing orientation and mobility services in Alabama. It was not without the investment of considerable time and energy that this report could be produced.

The task force also acknowledges the cooperation and support of the agencies by whom the task force members are employed, including the Alabama Division of Rehabilitation Services, the Alabama Institute for Deaf and Blind, the Veterans Administration Southeast Regional Center on Blindness, the Independent Living Center of Birmingham, and the Jefferson County School System. We are particularly grateful for the opportunity given to us by the Division of Rehabilitation Services (DRS) to undertake such an endeavor. Support from the local DRS office was particularly helpful in this endeavor.

It is our desire that ultimately this report will result in the provision of sorely needed orientation and mobility services throughout Alabama.



Harvey Clark, Co-Chairperson



Barry Stephens, Co-Chairperson

Alabama Orientation and Mobility Task Force

Birmingham, Alabama
March 1, 1991

CHAPTER I

The first part of the book is devoted to a general survey of the subject. It begins with a definition of the term "philosophy" and then proceeds to a discussion of the various branches of the subject. The author then discusses the history of philosophy, from the ancient Greeks to the modern era. He then discusses the various schools of thought, such as Platonism, Aristotelism, and Stoicism. The book then discusses the various methods of philosophy, such as dialectic, induction, and deduction. The book then discusses the various problems of philosophy, such as the problem of knowledge, the problem of value, and the problem of existence. The book then discusses the various solutions to these problems, such as the theory of forms, the theory of the soul, and the theory of the universe. The book then discusses the various applications of philosophy, such as ethics, politics, and education. The book then discusses the various influences of philosophy, such as religion, science, and art. The book then discusses the various contributions of philosophy, such as the development of logic, the development of science, and the development of art. The book then discusses the various criticisms of philosophy, such as the charge of dogmatism, the charge of skepticism, and the charge of relativism. The book then discusses the various defenses of philosophy, such as the defense of dogmatism, the defense of skepticism, and the defense of relativism. The book then discusses the various future prospects of philosophy, such as the development of a new philosophy, the development of a new method, and the development of a new problem. The book then discusses the various conclusions of philosophy, such as the conclusion that philosophy is a science, the conclusion that philosophy is an art, and the conclusion that philosophy is a way of life. The book then discusses the various recommendations of philosophy, such as the recommendation to study philosophy, the recommendation to practice philosophy, and the recommendation to live philosophy. The book then discusses the various acknowledgments of philosophy, such as the acknowledgment of the help of friends and family, the acknowledgment of the help of teachers and students, and the acknowledgment of the help of the publisher. The book then discusses the various index of philosophy, such as the index of names, the index of subjects, and the index of terms. The book then discusses the various appendices of philosophy, such as the appendix on logic, the appendix on science, and the appendix on art. The book then discusses the various glossaries of philosophy, such as the glossary of terms, the glossary of names, and the glossary of subjects. 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ALABAMA ORIENTATION AND MOBILITY TASK FORCE

Introduction

The Alabama Orientation and Mobility Task Force was formed for the purpose of initiating a dialogue regarding the many unaddressed issues surrounding the critical need for orientation and mobility services in the state. As these O&M needs have become more and more apparent, and a continuing barrier to the independence and employment of blind persons, a consensus among several rehabilitation field workers led to the initiation of this task force. In the spirit of "challenging the process", this group of field staff and supervisors from several rehabilitation programs serving the blind collaborated to begin to address the problems related to the lack of O&M training available to blind persons in Alabama. This report reflects the subsequent recommendations of the Alabama O&M Task Force members.

A list of task force members, their backgrounds and areas of expertise in the field of blindness, is presented in Appendix A, and attests to the breadth and depth of consultation that went into this report. These twelve (12) task force members represent a total of one hundred eighty-six (186) years cumulative experience in the field of rehabilitation and special education. Because of time, travel, and logistical constraints, the task force was composed primarily of professionals based in the Birmingham area. The Task Force was not limited, however, to local input but compiled information from several state and national sources.

The task force held a total of eleven (11) meetings, some in subcommittee, during a period from April 17 to December 1, 1990. During their deliberations the Task Force received input from various sources nationwide, including state rehabilitation agencies serving the blind, the American Foundation for the Blind (AFB), the Association for Education and Rehabilitation of the Blind and Visually Impaired (AER), the Veterans Administration Rehabilitation Centers, and university training programs, to name a few.

A nationwide REHABNET survey was undertaken to determine the state of O&M services among public rehabilitation agencies, and a summary of these findings is contained in Appendix B. A Glossary of terms as used in this report is contained in Appendix C.

Additionally, an extensive review of available literature on the subject was undertaken. This review of literature dates back to 1961, with emphasis on most recent publications. A copy of this extensive review of literature is found in Appendix D. Additional materials collected by the task force are referenced in this report, others are on file. This information combined with the collective experience and insight of task force members, is reflected in the narrative section of this report.

It is the desire and intent of the task force that the primary agencies serving the blind in Alabama, the Division of Rehabilitation Services (DRS) and the Alabama Institute for Deaf and Blind (AIDB), give careful consideration to these findings and recommendations; and aggressively pursue viable strategies for the provision of quality orientation and mobility services, to the visually impaired citizens of Alabama.

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PROLOGUE

BACKGROUND INFORMATION OF THE HISTORY AND PROCESS OF ORIENTATION AND MOBILITY TRAINING

The following excerpts from the literature establishes a historical perspective crucial to a full appreciation of the deliberations and recommendations presented in this report. The task force affirms that in order to properly understand the present, and successfully prepare for the future, requires an empathic understanding of both history and process.

HISTORICAL PERSPECTIVE

"When we discuss mobility we are in fact giving some thought to probably the most complex skill man can acquire. Because we each develop an ability to be peripatetic through the natural use of our motor system and our numerous sensory inputs, we normally give little thought to how we move about. Certainly, the average person does not consider it to be a skill. But when deprived of vision through blindness or a blindfold, we all find that this skill has deteriorated to an almost non-existent level" (Kay, 1974).

"It was generally agreed that one of the most valuable accomplishments of the preliminary adjustment program at Valley Forge was the 'long cane' foot travel system, developed by Sergeant (later Lieutenant) Richard E. Hoover, who was one of the soldiers brought to the Valley Forge eye center when the Surgeon General's office spread a net through all Stateside Army service commands to locate men with experience in work for the blind.

"Before the war Hoover had been a teacher and physical training coach at the Maryland School for the Blind. He was convinced that the "white cane" customarily used by blind people was too short, too heavy, too cumbersome, and not a sufficiently good sound conductor to be really helpful as an aid to mobility. Moreover, it was employed in the wrong way and for the wrong purpose. The most serious problem of all was that no system existed for teaching blind people how to use a cane to maximum advantage. The assumption had always been that each person could learn for himself.

"A man of scientific bent (after the war he entered medical school and became a distinguished ophthalmologist), Hoover came up with the 'long cane.' It was made of metal with a plastic tip, was six to ten inches longer than the usual wooden cane, had a shaft of about half the thickness of the latter, and weighed only six or seven ounces.

"What came to be known as the Hoover cane was topped by a shepherd's crook that protected the hand. Designed for use as a bumper and a probe, the cane had to be employed in a definite

REPORT

ON THE PROGRESS OF THE WORK DURING THE YEAR 1900

BY THE SECRETARY OF THE BOARD OF TRADE

LONDON: H.M.S.O. 1901

PRINTED BY THE GOVERNMENT PRINTER

The Board of Trade has the honor to acknowledge the receipt of the Report of the Secretary of the Board of Trade, dated 1st January 1901, and to express its appreciation of the services rendered by him during the year 1900.

The Report of the Secretary of the Board of Trade, dated 1st January 1901, contains a full and complete account of the work done by the Board of Trade during the year 1900. The Report is divided into two parts, the first part dealing with the work done by the Board of Trade during the year 1900, and the second part dealing with the work done by the Board of Trade during the year 1901.

The Board of Trade has the honor to acknowledge the receipt of the Report of the Secretary of the Board of Trade, dated 1st January 1901, and to express its appreciation of the services rendered by him during the year 1900.

technique, sweeping a low arc in front of the user in a rhythmic, cross-body pattern in which it lightly touched the ground in front of the foot that was about to be brought forward, insuring that this foot had an unobstructed spot on which to land. As it described the arc from one side to the other, the long cane struck any obstruction (a wall, the edge of a half-open door) directly in front of the blind man. It was long enough to keep the user from stooping while executing the arc or changing posture when going down or up a step. Its metallic body was a good sound conductor which provided important orientation clues to the presence of walls, open spaces or changes in terrain.

"Skill in the use of the cane was acquired only through careful teaching and rigorous practice. At Valley Forge Hoover trained a group of instructors in the systematic and orderly method by means of which they, in turn, could train the newly blinded men (p. 264)...

"One of the first efforts to share the lessons learned at Valley Forge with agencies serving the civilian blind was a training manual prepared for the 'orienters' at that Army hospital. As a service to its readers, the Outlook published the document in full in its issue of December 1947. It was a well-intentioned gesture, but it backfired. All over the country impulsive workers for the blind who read and clipped the article concluded that they now had all they needed to know to go and do likewise. The more thoughtful among them recognized that there was more to it...

"Other agencies, aware that the long cane method was being refined at the Hines VA center, applied for permission to send staff members there for a week or two of observation. A number of such requests were granted, but those agency heads who hoped that a brief visit would enable the observer to return fully equipped to introduce a mobility program were disappointed. Instead, a former member of the Hines staff was to recall, the visits 'served chiefly to whet the appetites for a much more thorough indoctrination and training' (p. 316)...

"[Mobility specialists work] with the sensorium of the blind person, making use of all the senses which remain when sight is gone;... with the intelligence of the blind person, giving knowledge of objectively evaluated methods of travel without sight;... with the will of the blind person, stimulating confidence in his ability to move without dependence" (p. 317) (Koestler, 1976).

"... In the late 1940s it was found that observers of the training program could not replicate the program's positive outcomes with short-term training. Many representatives of agencies who visited Hines tried, unsuccessfully, to carry away seeds from which to develop similar programs.

"By 1953 the dangers of untrained individuals setting themselves up as O&M instructors were recognized" (pp. 56- 57)... (Wiener & Uslan, 1990).

"Enough has been written, perhaps, concerning Hines as a culture for orientation and mobility. However, the degree to which it accumulated respect during the 1950's may be further illustrated by the stream of visitors --observers from work for the blind-- who

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the specific results of the work.

2. The second part of the report deals with the specific results of the work. It is divided into three main sections: the first section deals with the results of the work in the field of agriculture, the second section deals with the results of the work in the field of industry, and the third section deals with the results of the work in the field of commerce.

3. The third part of the report deals with the conclusions of the work. It is divided into two main sections: the first section deals with the conclusions of the work in the field of agriculture, and the second section deals with the conclusions of the work in the field of industry and commerce.

4. The fourth part of the report deals with the recommendations of the work. It is divided into two main sections: the first section deals with the recommendations of the work in the field of agriculture, and the second section deals with the recommendations of the work in the field of industry and commerce.

5. The fifth part of the report deals with the summary of the work. It is divided into two main sections: the first section deals with the summary of the work in the field of agriculture, and the second section deals with the summary of the work in the field of industry and commerce.

made arrangements to view the program at first hand for several days or weeks... These visits served chiefly to whet the appetites for a much more thorough indoctrination and training. Often the agency heads who had arranged for their staff to go to Hines had hoped they would return, having mastered whatever techniques were in use and could without undue effort mold them into the agency program. Almost invariably these hopes were doomed to disappointment...

"... 'Necessary emotional conditioning was so intricate a process, the ingraining of principles through time-consuming laboratory experience so necessary, that the needs of the situation could not be met in a compressed teaching program of two weeks, two months, or even four months.'

"...the demands of the situation would be a deep identification with blindness and something of what it entailed on a basis so intimate and particular that the instructor would gain the habit of thinking all the time about how to manage problems of living without sight" (Blasch, 1971).

"During the 1950s, the Hines staff tried to respond to these requests and to share as much information as they could. According to Malamazian (1970), visitors to Hines came for varying amounts of time ranging from several days to a few weeks to observe the program and learn how to teach the techniques that were developed. In addition, Hines staff members sponsored by agencies for the blind gave short-term courses for groups of workers for the blind around the country. The effect this sharing of newly developed knowledge had was expressed by Malamazian thus, 'In most cases, all we imparted was a hearty respect for street crossings, a frustrating respect for ourselves and a desire on the part of the would-be instructor either to have a lot more training or have nothing to do with it himself because he thought there was too much risk' [Malamazian, 1970, p. 72] (pp. 625- 626).

"... A major decision was to establish the minimum training period for mobility specialists as one year of graduate study. The greatest support for this provision came from mobility instructors attending the meeting, especially those with the longest experience, who were unwilling to support short-term training because their own experiences had proven it to be ineffective" (Wiener & Welsh, 1980).

"Based on the successful history of the University programs that are training mobility specialists, Division IX of the Association for Education and Rehabilitation of the Blind and Visually Impaired reaffirms its support of these programs" (Blasch, 1990).

PROCESS PERSPECTIVE

"... [because] blindness is a severe blow which creates unique needs, then we must insist there be people trained to meet these unique and specific needs. We need these specially trained people in four areas: education of the visually handicapped; rehabilitation teaching; orientation and mobility instruction; and employment placement...

"Do we call them professionals, expect them to act thus and yet treat and pay them like technicians?..." (Gallagher, 1988).

"The acquisition of advanced orientation and mobility skills depends on the development of body image, spatial orientation, positional relationships, and sensory awareness. The mastery of these prerequisite skills requires instruction by a thoroughly prepared orientation and mobility specialist..." (Hatlen & Curry, 1987).

"... areas of instruction include but are not limited to concept development, auditory training, orientation and wayfinding, use of orientation aids and mobility devices, low vision training for mobility, and special considerations for pre-school and multiply handicapped individuals..." (Blasch, 1990).

"... the need for professional training must be emphasized, for the mobility therapist takes the life and safety of his trainees into his hands..."

"... it is not surprising to find many partially trained or even wholly untrained persons volunteering to show blind people how to get about. But to give a blind person confidence without proper and thorough training is worse than nothing.

"The proper use of this cane must be taught by a therapist especially trained in the Hoover cane technique; the cane is almost worse than useless without proper instruction. But with it, the average blind person can learn to move with independence, ease, and even grace (p. 140)..."

"...many institutions and agencies still do not recognize the vital importance of mobility training, nor the necessity for training the blind person's senses on the one hand and training the therapist on the other..." (Carroll, 1961).

"What an easy job mobility specialists would have if all we had to do was present a visually impaired person with a cane, teach them a few basic cane techniques, and off they would go--safe, independent, relaxed travelers. However, it is much more involved than that. Most congenitally blind persons need to understand spatial concepts before they are ready to 'hit the streets.' They may lack knowledge of these concepts because of experiential deprivation or overprotection while growing up, or for other reasons. Others who are adventitiously blind or have lost their vision after having had enough residual vision to recognize and interpret their environment, experience a real fear of traveling independently because 'they know what is out there'" (Blakesles, 1977).

"...To teach effectively, O&M specialists must put themselves in their students' place as much as possible and interpret environmental cues and potentially dangerous situations, individualize and adapt each lesson, judge when students are emotionally and psychologically ready to learn and perform skills and tasks, and determine when a student has mastered tasks. In addition, they must help instill students' confidence in relying on

The first part of the paper is devoted to a general discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The second part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The third part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The fourth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The fifth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The sixth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The seventh part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The eighth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The ninth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science. The tenth part of the paper is devoted to a detailed discussion of the problem of the origin of life. It is shown that the problem is one of the most important and interesting in the history of science.

themselves to complete tasks safely and independently, develop and use specialized media and materials according to the students' individual needs, analyze and select teaching environments that will be most appropriate for individual students, and apply learning theories that are appropriate to the individuals. Furthermore, they have to master highly specialized communication skills, including adapting language appropriate to each student and using communication systems and graphic aids. All these competencies demand the creativity, flexibility, and sensitivity necessary to ply the art of teaching (p. 14).

"...The O&M specialist must be able to understand what environmental information is available to the blind person in a dangerous situation and how to use it (pp. 18-19).

"O&M often involves learning to deal with high-risk situations, such as crossing streets and using rapid rail-transit systems. Blind persons rightfully expect to have a trusting relationship with their O&M instructors; they must feel comfortable putting their lives in their instructors' hands. O&M specialists must be able to foster and earn this relationship and use it to be able to gauge expectations under stressful situations. They should be able to answer questions such as these: Is the student intellectually and emotionally ready? How much pressure is too much? Has the student been sufficiently challenged in situations that reflect real-life dangers (p. 19)?" (Uslan, Hill, & Peck, 1989).

"... Part of the mobility instruction process must focus on helping the client to develop sound judgment in a variety of quite different situations. Can the client be helped to function at a realistic level or risk taking? Can the client be helped to stay calm and make good decisions under the stress of being disoriented? Can the client learn to control his emotional reaction when approached by a helper who assists in a patronizing way? Can the client learn to be an effective problem solver? While each of these behaviors can be defined behaviorally, it is difficult to define which behaviors can be considered to demonstrate sound judgment...

"... shaping, or the method of successive approximations... involves the rewarding of behaviors that are somewhat like the desired terminal behavior, gradually applying the reward for behavior which is closer to the desired terminal behavior until the client is performing adequately. In order to use shaping techniques, the mobility specialist must be able to analyze complex terminal behaviors into component parts arranged from the simplest to the most complex.

"The individualized instruction that has characterized mobility services facilitates shaping or teaching by successive approximations. When teaching one-to-one, the mobility specialist is able to control the difficulty and the complexity of any problem that the client will experience by stepping into the situation at a particular point. For example, if a client veers while crossing a residential street, he may cross the intersection diagonally, end up at the wrong corner of the intersection, and proceed in what may seem like the correct direction but is in reality quite wrong. The mobility specialist may allow the client to follow this erroneous course until he discovers himself that a mistake has been made. At

that point, if the instructor still remains distant from the client, he is structuring the lesson to include recovery from the error, which will require a high level of skill. However, the mobility specialist can limit the level of difficulty of the task at any of a number of points along the way depending on his objectives for that particular lesson. He can halt the client at the point of stepping up on the opposite curb, telling him that an error has been made, and then leaving him to recover from that point. Or, the mobility specialist can inform the client, while he is still in the street, that he has veered into the parallel street and encourage him to make the necessary corrections. The specialist, observing that the client is lining up for the crossing in such a way as to make a diagonal crossing likely, may ask the client to check alignment before crossing, gearing the lesson to a still different level of difficulty. Ultimately the client will need to be able to perform even the most complex of these tasks, but the mobility specialist is usually able to control the level of difficulty according to what represents the most efficient learning experience for the client during that particular lesson.

"...If the original learning takes place in an artificial environment that is very different from the actual travel environment, transfer is less likely to occur. For this reason mobility specialists have insisted on the need to conduct lessons in actual environments representing a cross section of the areas through which a typical client will travel independently following completion of training" (LaDuke & Welsh, 1980).

"While the ability to deal with the unexpected is a function of the lesson plans in real environments, the mobility specialist has an overriding responsibility to try to systematically expose the client to all possible contingencies that might occur while traveling independently... While it is impossible to present all possible occurrences, the client should be exposed to a sufficiently wide variety of situations so that he will less likely experience anxiety as a result of not having tools to cope with new situations that come up." (Welsh, 1980).

"...In attempting to eliminate rotary movement the practitioner needs to become a diagnostician to determine which of the influential variables are the causes in this specific individual's case. Is it the type of imagery this person is employing, is it due to an excessive lateral shift of the center of gravity as he commences his street-crossing, or is it a conscious or unconscious over-compensation due to a fear of the parallel traffic?... Progression of the individual into more threatening and complex areas without eliminating these problems will tend to ensure that he give up independent mobility because it is too difficult and ineffective" (Suterko, 1972).

"Orientation and Mobility Instructors must be knowledgeable in the specific techniques of orientation and mobility as well as such areas as psychosocial issues, child development, concept development, sensory awareness and development, the nature and impact of additional handicaps, research, low vision, and

educational and rehabilitative aspects of orientation and mobility services...

"AER reaffirms its support for both university training in orientation and mobility and for the present AER certification standards...

"AER urge[s] all schools and agencies serving children and adults who are visually impaired to hire AER certified Orientation and Mobility Instructors" (AER Resolution #88-5, 1989).

ALABAMA O&M TASK FORCE

Narrative

OBJECTIVE I

Define present and projected need for Orientation and Mobility services in Alabama.

Review of Pertinent Literature

"The ability to move independently, safely, and purposefully through the environment is a skill of primary importance in the development of each individual" (Blasch, 1990). "In traveling, the visually impaired person who has the options of moving independently or going with a guide has more opportunity to respond to each day's challenges in a variety of ways that contribute to his sense of competence" (Welsh, 1980).

"The interaction between successful orientation and mobility and the self-concept, feelings of independence, motivation for rehabilitation, the attitude of the family, and the ability to cope with people on the street is complex and reciprocal. A positive self-concept can be both a cause and an effect of success in mobility" (Welsh, 1980). "Restoring mobility to the extent needed for a normal life and work is necessarily one of the major objectives of a rehabilitation program... the best yardstick of our progress toward the restoration of blind persons on the one hand and of society on the other is, in the final analysis, not so much the number of people served as the number who have been served so well that they no longer need the services of the agency. Our final purpose is to help as many blind persons as possible to achieve such an adjustment to their blindness that they are free from dependence on us and from abnormal dependence on anyone" (Carroll, 1961).

"The rehabilitation agency in the broadest sense has the overall responsibility for assisting the blind person in meeting those needs which will enable him to function at his maximal potential despite his handicap" (Rives, 1980, p. 187).

"Our studies in the early 1960's ... clearly indicated that the vast majority of blind persons in the United States are unable to travel independently. While we have made some impact through the training of special mobility instructors and the development of

THE HISTORY OF THE

REPUBLIC OF THE UNITED STATES

OF AMERICA

BY JAMES MADISON

IN TWO VOLUMES

VOLUME I

THE HISTORY OF THE UNITED STATES OF AMERICA, FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME. BY JAMES MADISON, ESQ. OF VIRGINIA.

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comprehensive rehabilitation centers for the blind, it is still a fact that the majority of blind persons... are unable to move about independently..." (MacFarland, 1972, pp. 369 -370).

O&M continues to be viewed by some as a related or optional service, not what it really is --an essential service for the education and rehabilitation of blind and visually impaired persons.

"Many policymakers who view O&M as a related service, not a basic need,... do not realize the primary benefits of independent travel, such as freedom, confidence, and self-esteem, and the many secondary benefits as well --exploratory behavior, active decision making, socialization, involvement in career/vocational-related experiences, and so on" (Uslan, Hill, & Peck, 1989, pp. 27- 28).

Though no one would argue in opposition for the actual need for more O&M training, this question remains: How great is the need? Though projecting the need may be accomplished in various ways (as is done in this report), one interesting approach was taken by Welsh and Blasch, excerpted as follows:

"One of the main interests of the researchers, however, was to determine the separation between the actual need for mobility specialists, defined by open positions that have currently not been filled, and the theoretical need for mobility specialists, defined by the administrators' perceptions as to how many mobility specialists they could use if all additional funds were available. Fifty actual positions were discovered by the survey; however, the respondents felt that if funds were available, there is a need for the services of five mobility specialists for every actual position that is available (p. 441)... If we ever begin to provide mobility training to all of those persons who need it, the demand for mobility specialists will be five times greater than the current output ..." (Welsh & Blasch, 1974, p. 443).

One major problem stemming from the great need for O&M services relates to the shortage of qualified personnel in the field. Limited federal support of programs for training O&M specialists exacerbates the problem, as pointed out in a recent article by Uslan, Peck and Hill, which stated:

"... An analysis of federal support for O&M training at the university level ... concluded that the prospect for increased funding is unlikely, at least in the short term. On the basis of this information, it is clear that personnel shortages associated with the shortage of O&M specialists will continue to worsen over time" (Uslan, Hill, & Peck, 1989, p. 19).

Task Force Observations

Two main agencies, the Division of Rehabilitation Services and Alabama Institute for Deaf and Blind, serve visually impaired citizens in Alabama. There exists a general consensus among the DRS vocational rehabilitation counselors for the blind, rehabilitation teachers, and AIDB Regional Center personnel that the present need for O&M Services far outstrips the availability of existing services in Alabama.

Within the DRS alone each year, the vocational rehabilitation program serves approximately 1000 visually impaired persons, and the rehabilitation teaching program serves more than 1700 persons. Subtracting the approximately 25% of cases served jointly by counselors and teachers, a total of some 2,025 visually impaired persons are served each year by DRS adult programs alone. DRS also serves a number of visually impaired persons under age 16 through the children and youth programs. Two O&Ms are employed by DRS; one initiated through the OASIS grant, the other employed in north Alabama to avoid the cost of contracting services.

Nationally it is estimated that numbers reflected in rehabilitation agency caseloads may represent only 10-20% of the actual number of persons eligible for such services.

The two DRS O&M specialists work with an itinerant caseload of roughly 15 clients at any one time with the average case requiring 6-12 months to complete an O&M training program. This results in a field O&M specialist closing approximately 25-35 cases per year. Presently the DRS O&M specialists in Jefferson County can document a backlog of more than 100 cases waiting to be served. These cases by no means represent the total need in the area, but a small percentage of referrals determined to be of severe or critical need. Though some of the O&M needs in the Jefferson County area have been recorded, no concerted effort has been made to comprehensively document the O&M needs statewide.

Furthermore, the AIDB Regional Centers in Alabama have active client roles of some 390 individuals (many of whom are visually impaired persons, and a large percentage of which are not clients enrolled in DRS programs. AIDB also serves approximately 122 visually impaired children from birth to five years of age through the Parent Infant Program. No full-time certified O&M's are employed in the AIDB Regional Centers.

Additional visually impaired persons are served annually through the state's two Independent Living Centers in Birmingham and Mobile. No orientation and mobility specialists are employed by these centers.

Under the DRS Rehabilitation Teaching is Project OASIS, a Title VII Part C Federal Grant Program, designed to serve visually

impaired persons over age 55. One major goal of the project has been to make O&M services available to these clients. At the present time, Project OASIS has been able to successfully recruit only one O&M specialist. Therefore less than 5% of OASIS' 1000+ clients served annually receive services from a certified O&M specialist. Federal monies have been available for hiring two additional O&M specialists, but due in part to barriers outlined in Objective I and Objective II of this report, these positions have gone unfilled.

According to the American Printing House for the Blind (APH), in 1990 some 928 severely visually impaired children in Alabama are on their roles. These are students receiving services through the DRS Childrens Rehabilitation Services, Alabama School for the Blind, public schools, and other programs. Only 129 of this number are enrolled at ASB, where O&M services are systematically available. APH statistics break down as follows:

Alabama School for the Blind	130
Helen Keller School	35
City LEAS	120
County LEAS	213
Non-Public LEAS	25
Parent Infant Program	177
E. H. Gentry	54
Office of Field Services	90
Childrens Rehabilitation Services	29
Other	96
 TOTAL	 969

Alabama Library Services for the Blind have on roll in Blount, Chilton, Jefferson, and Shelby counties alone some 1250 individuals with significant visual impairments. According to a recent needs survey conducted among these clients it was determined that, due to the lack of O&M services in Alabama, historically, they were for the most part unaware of their own personal need for, the possible opportunities for, and potential benefits from, O&M services.

In a 1986 survey of 552 elderly clients being served through the DRS rehabilitation teaching program, participants ranked O&M services and transportation highest on the list of their needs. Presently, only one O&M specialist has been employed, and is assigned to spend 80% of his time to meet these needs. It should be noted that the population over age 65 has prevalence rates of severe visual impairment as great as six times higher than that of other age groups. Statistics further indicate that such rates are highest in the southeastern United States (Data on Blindness and Visual Impairment, AFB, 1988).

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author argues that without reliable records, it is impossible to make informed decisions or to identify areas for improvement.

2. The second part of the paper focuses on the challenges of record-keeping in a rapidly changing environment. The author notes that new technologies and regulations can make it difficult to keep records up-to-date and accurate. However, the author also points out that these challenges can be overcome with the right tools and processes.

3. The third part of the paper provides a detailed overview of the various methods used to collect and analyze data. The author describes both traditional methods, such as surveys and interviews, and modern methods, such as data mining and social media analysis. The author also discusses the importance of ensuring the quality and reliability of the data collected.

4. The fourth part of the paper discusses the ethical considerations of data collection and analysis. The author emphasizes that it is important to be transparent about how data is collected and used, and to ensure that the data is used in a way that respects the privacy and rights of individuals. The author also discusses the importance of obtaining informed consent from participants in research studies.

5. The fifth part of the paper provides a conclusion and a list of recommendations for future research. The author concludes that while there are many challenges to record-keeping, the benefits of accurate records are clear. The author recommends that businesses and organizations invest in the resources and tools needed to maintain accurate records, and that researchers continue to explore new methods for data collection and analysis.

In September, 1989 the SDE/DRS sponsored a study of persons with disabling conditions in Alabama. This study, PROFILE IN ALABAMA, Incidence and Prevalence of Disabling Conditions, was conducted by the Auburn University at Montgomery (AUM) Center for Rehabilitation Resources. Among study respondents who reported a vision problem, the age group with the highest prevalence rate is the fifty-five years and older group. This group accounts for over 80% of all participants with vision problems.

The study also notes that, "compared to national statistics, Alabama's 5.7% rate is slightly higher than the 53.8 persons per 1,000 rate (5.38%) reported for the United States. The Library of Congress also reports an incidence rate of 4.2%, which indicates the rate of onset of visual impairments within the last twelve months."

A survey of state agencies serving the blind in the United States was conducted by this task force in June of 1990 via the national REHABNET. Among these agencies serving the blind, the general consensus was that the need for O&M services far outweighs the availability of such services. Even states which have a base of O&M staff for serving their populations report maintaining lists of individuals waiting for services (Appendix B).

If one assumes that states which are proudest of their services to the blind are most likely to respond to such an inquiry; then it is sad to surmise that the results of this survey represents the high end of the continuum regarding O&M services in state rehabilitation agencies. It is obvious that great autonomy exist within each state and their subsequent approach to this challenge. It is also apparent that few states have done formal evaluation and planning toward tenacious resolution of the lack of these services to their clientele. The resounding message in the vast majority of cases is that the apparent needs far outstrip the current level of services. Those responding to the survey estimate that generally, 50% to 80% or more of the visually impaired clients their states serve would benefit from O&M instruction.

Several respondents to the REHABNET survey made salient observations related to the need for O&M services. Their remarks included some of the following:

"...the ability to travel independently is essential to the attainment of all other rehabilitation objectives."

"...the need for adequate O&M services is outstripping the ability to provide quality services in a timely and efficient manner."

"With the growing number of the elderly population with visual problems, the need for some level of L&M services will (stand to only) increase."

"The federal regulations governing our program states that... 'The state plan must assure that staff in sufficient number and with appropriate qualifications is available to carry out all functions'... Our lack of certified orientation and mobility instructors could potentially endanger continued federal funding of

our program if we were reviewed and were not considered in compliance."

"Our service delivery model is currently based on historical precedent--what we did yesterday is what we will be doing today and, unfortunately, tomorrow."

Statistics indicate that the largest percentages of blind and visually impaired persons reside in the southern part of the United States. The 1988 American Foundation for the Blind report "Data on Blindness and Visual Impairments in the U. S." indicates that while some 44% of the severely visually impaired population reside in the South, only some 27% of the agencies serving the blind are located in the South. Such a disparity only increases the need for these agencies to make special efforts to provide the services needed by their clients.

It is estimated that 1 - 2% of the total population in the United States has a significant visual impairment impacting upon functional abilities. Taking a median figure of 1.5%, some 63,000 of Alabama's citizens fall into this category, and may be considered candidates for O&M services.

The Task Force noted that one of the greatest barriers to the successful employment of blind persons is related to the crucial job readiness skill of mobility. At present, client safety and competent travel skills are not a widely offered service of programs offered to blind and visually impaired consumers in Alabama. Often if a client's program can not be moved forward, it is because of lack of O&M services (Lee, 1990).

O&M task force members who have worked with Alabama high school graduates preparing for vocational rehabilitation programs find, for the most part, that these individuals do not have adequate independent travel skills. Though O&M training is essential to students in educational settings, it is often unavailable, or the skills developed in such a setting often do not prove adequate to making one a competent traveler in the "real world". Thus, rehabilitations agencies do not often serve clients who initially present themselves as comprehensively competent travelers. This need has been observed by others in the field as Curry and Hatlen point out:

"The necessity of becoming a good traveler and the opportunity to develop good travel skills usually do not arise until a person lives away from home. Therefore, blind and visually impaired high school graduates often do not have extensive experience in orientation and mobility and thus lack knowledge that is basic to the development of advanced skills in this area" (Curry & Hatlen, 1987).

The task force was able to identify a total of 17 full-time O&M specialists presently employed in Alabama. These individuals are employed as follows: Veterans Administration--9, Public School

Systems--3, AIDB in Talladega--2, DRS--2, and private rehabilitation facilities--1. Of the total 17 presently employed, 14 are committed to serving narrowly defined populations in specific geographic areas (i.e., veterans, school children, etc.). Only two of the 17 O&M specialists employed in Alabama are readily available to the state's public rehabilitation agencies to provide field-based mobility services.

Given that O&M training is a need for most severely visually impaired persons, there is a great disparity in the number of O&M specialist positions in comparison to the number of other personnel employed by agencies serving the blind (i.e., rehabilitation counselors and rehabilitation teachers, etc.). Field observation and statistical data point to a critical need for agencies to plan for hiring more O&M specialists in Alabama.

A major provider of services to blind persons, the Veterans Administration Southeastern Blind Rehabilitation Center (VASBRC) is located at the VA Medical Center in Birmingham. The VASBRC comprehensive training program strongly emphasizes both orientation and mobility and low vision rehabilitation training. Though the VASBRC is the largest employer of O&M specialists in Alabama, only a small number of Alabamians are served annually through this program because it is a regional center targeted exclusively to blinded veterans.

Recognizing the severe need for O&M services in the state, the Alabama Chapter of AER at its' most recent annual training conference in August 1990 passed a resolution encouraging, "agencies and organizations serving blind persons to make every effort to procure orientation and mobility services for their clients."

It is the consensus of the Alabama O&M Task Force that most if not all of the clients of agencies serving the blind should at least receive some formal O&M screening or evaluation. This position is consistently reflected in the literature on blindness rehabilitation. Due to a lack of qualified personnel, this is not presently done and DRS and AIDB caseworkers note that O&M must often simply be ignored in planning needed services with their clients. Even blind consumers themselves remain unaware of their own potential to travel independently.

4. The fourth part of the document discusses the company's commitment to environmental sustainability. It states that the company will continue to work to reduce its carbon footprint and to promote sustainable practices throughout its operations.

5. The fifth part of the document describes the company's plans for future growth and expansion. It states that the company is confident in its ability to continue to grow and to provide long-term value to its shareholders.

OBJECTIVE II

Define the problems and barriers that presently exist in regard to providing adequate O&M services in Alabama

Review of Pertinent Literature

"Planning within the public sector is not easy. Uncertain and unstable financial commitments frequently force agencies to fight to preserve what exists, rather than expanding or changing direction. By allocating the time and funds necessary to establish goals and missions, to assess the environment, and to establish priorities and direction for the future, the Commission provided itself with a coherent direction and a document which was used to not only to maintain our position but, in fact, to expand our resources in a time of declining revenues... (It) gave CDBVI, the smallest of divisions within the Department of Human Services, a competitive edge with other agencies because of the structure and focus it provided (p. 37)" (Krajczar & Delung, 1985).

"One final area to avoid, though in many cases the new mobility instructor will have little say in the matter, is that of entering employment where one's direct supervisory personnel know little or nothing about the techniques, requirements, or idiosyncrasies involved in a mobility program, and worse yet, are unbending in their acceptance of present day techniques being taught the mobility student... Where such a situation does arise, the mobility specialist must work to provide a good in-service educational program to be offered to the supervisory personnel and strive for cooperation. If the mobility specialist is not successful in his efforts, that is to the degree that lack of cooperation interferes with accomplishing the objectives he has set regarding his program, then it might become necessary for him to direct his efforts elsewhere, where his time will benefit more clients. Mobility specialists are scarce, not their jobs" (Aust, 1972).

"... During the 60's and 70's when social consciousness was on the rise, interest was high in entering the professions serving children and adults who are blind. Today, emphasis has switched to professions that reward the employee financially and convey the highest prestige. Unfortunately, in today's climate the professions serving individuals with impaired vision meet neither of these criteria (p. 3).

"... individuals enter our field most often as a result of contact with a professional within the field or with a blind person (p. 5)...

"Data from... various surveys clearly suggest that the most effective techniques [for recruiting] incorporate direct personal contact (p. 10)...

"... the most critical element in the morale of staff seemed to be the establishment of good working relations with colleagues, appropriate sized caseloads, and the ability to influence administrative decisions affecting their work (p. 11) (Wiener & Bussen, 1987). [See also Wiener, 1987, p. 2]

"Recruitment from traditional training programs for teachers of the visually handicapped into rural areas is an unrealistic goal for present, financially constricted conditions. Young people receiving training in these university programs are in such demand that there is no incentive for graduates to go into rural areas. The graduates are often younger teachers who desire the flexibility and support services provided in large city... systems. They do not feel confident in taking jobs where other resources will not be available to augment their beginning teaching experiences.

"This lack of support services in rural areas is well documented... and many younger graduates are unwilling to think in terms of longitudinal program development when they are actively recruited by larger, richer, more advantageously located [programs]... Furthermore, their training programs often include various resources such as closed circuit TV's, various media devices, Optacons, agencies, etc., which may be scarce or unavailable in rural programs.

"...When streets and lights are not available, other landmarks, such as trees, fences, and variations in walking surfaces must be utilized. Development of routes when clues include farmyard sounds, small business emanations, and limited traffic must be incorporated into the training program...

"...The isolation of the teacher leads to problems of teacher 'burnout,' and a sense of alienation when no other person is knowledgeable about the professional interests of the teacher (p. 14)... (Sowell, Correa, & Wardell, 1987)."

"By 1980, the number of budgeted O&M vacancies in public schools was greater than in any other employment setting... The consequences of the high rate of growth of O&M specialists working in the public schools compared to all other employment sectors is in itself a significant trend (p. 21).

"... In the 1983 sample, O&M specialists who worked in public schools earned more money than did those who worked in state or private agencies and residential schools. Only the relatively few O&M specialists who worked in VA facilities earned more. Considering the recent dramatic rise in teachers' salaries, public schools will no doubt continue to offer competitive salaries for a 10-month work year, making them an attractive option (pp. 22- 23).

"University-trained O&M specialists will continue to be attracted to public schools. Unless state and private rehabilitation agencies and residential schools increase their salaries and benefits, they will find it more and more difficult to recruit university-trained O&M specialists. Therefore, it is likely to be in these settings that the shortage of personnel will be felt the most (pp. 28- 29)..." (Uslan, Hill, & Peck, 1989).

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"... An analysis of federal support for O&M training at the university level ... concluded that the prospect for increased funding is unlikely, at least in the short term. On the basis of this information, it is clear that personnel shortages associated with the shortage of O&M specialists will continue to worsen over time" (Uslan, Hill, & Peck, 1989, p. 19).

"Low salaries and limited benefits in rehabilitation work for the blind do not enhance recruitment and retention...

"...The field seems to be overly dependent upon sources of professional satisfaction other than salaries and fringe benefits competitive with other employment...

"...Agencies frequently overemphasize drab routine paperwork, thereby utilizing the talents of a professionally trained person in a very restricted manner...

"...We would do well to acknowledge clearly and openly professional contributions of staff members by extending to them opportunities for involvement in programming and administrative decision-making" (Metcalf, 1987, p. 170).

"... The difficulty of traveling from rural areas to sites needed for teaching urban skills such as the use of escalators, elevators, revolving doors, and mass transit is a further complication of rural O&M training. Rural students need this training so they can function when necessary in nearby cities. Consistent development of these skills often has a low priority because of the need for local training and the expense of going to urban sites for training (Rosen & Sowell, 1989)."

"... [teaching] units may be needed for training in the areas of low vision, audition, proprioception, haptic perception, or in the area of posture and gait training. In some settings, other specialists such as occupational therapists, physical therapists, audiologists, and classroom teachers may be available to take responsibility for some of these prerequisite areas. Where they are not, it usually falls to the mobility specialist to provide needed learning experiences if the client is to benefit as completely as possible from mobility training" (LaDuke & Welsh, 1980).

"Daily lessons are also of utmost importance for the progress of the client. In some cases where the student has become a fairly competent traveler, the daily instruction may be reduced to possibly three times a week. But certainly at the outset and through most of the training, I would insist upon daily instruction for every client in my program" (Malamazian, 1972, p. 119).

"... If the mobility instructor finds that he is only able to work with his clients one or two occasions per week, he will find that the mobility program not only becomes a long drawn-out process, but also that the results are not nearly as positive as they would be if the clients could receive training five times per week" (Bohman, 1972).

Task Force Observations

Following are some task force observations regarding significant identifiable problems and barriers that exist in regard to providing adequate O & M services in Alabama. These problems relate primarily to "disincentives" operating in the current recruiting environment. The task force presents the following as significant areas of concern that decrease to potential for hiring qualified O&M specialist in Alabama. It should be noted that these disincentives are an even greater obstacle for recruiting experienced practitioners as opposed to non-experienced practitioners.

A. **LACK OF A COMPREHENSIVE PROGRAM MODEL** - The Lack of a clearly articulated, comprehensive, and systematic plan for O&M services in Alabama is a concern among potential employees. Agencies which do not plan for the future and are not goal oriented have difficulty attracting goal oriented personnel. Because O&M practitioners vary in their interest in providing services within certain program models (i.e. working with children, vocational clients, the elderly, etc.), agencies with a model which includes a range of service delivery systems create better opportunities for recruiting these much needed professions.

B. **LACK OF STATE MERIT CLASSIFICATION** - Currently there is no state merit classification for O & M Specialists in Alabama. This may easily be interpreted by potential employees as indicative of a lack of commitment to such services. O & M position descriptions need to be carefully worded to insure positions are presented in a favorable light in keeping with standard thinking within the O&M profession. For example, existing job descriptions under the Joint-Service agreement do not require O&M certification, whereas such a requirement is mandated under the State Department of Education's Administrative Policy Manual.

C. **EMPLOYEE DISINCENTIVES** - Limited term programs which require one year or less commitment on the part of an employer are typically unattractive to professionals looking to invest their skills meaningfully. At present the only O&M field positions actively being recruited by the DRS and the AIDB are funded through a short-term federal grant program (Project OASIS). Also, many practitioners find it undesirable that most grant programs limit the focus of services to one particular segment of the population.

Most DRS positions for staff working with the sensory impaired fall under the Joint Service arrangement between DRS and AIDB. Such an arrangement presents some areas of concern for potential employees. Some common concerns include: uncertainty of continued employment beyond the annual DRS/AIDB contract; vague parameters

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regarding a array of personnel issues such as personal liability coverage, eligibility for longevity pay, etc.; and general concerns regarding less than equal benefits with merit employees.

D. LIMITED VISIBLE ADMINISTRATIVE COMMITMENT/SUPPORT - Students graduating from university training programs tend to avoid working for agencies where supervision is not carried out by someone with a knowledge and background in O&M. Programs with a demonstrated commitment to the field through hiring and promoting O&M specialist within their administration stand a better chance of attracting O&M graduates.

Internship placements have proven to be a valuable recruiting tool. However, agencies lacking certified O&M specialists in middle management positions have difficulty competing for internship placement opportunities offered through university training programs. Internship supervision requires that much time be spent observing, discussing with interns, and reporting to universities on interns' interactions with consumers, activities which must be conducted by a knowledgeable and experienced practitioner who has attained AER professional certification in O&M. Most university programs seek internships for their students with agencies that have a demonstrated commitment to providing O&M services within variety of settings. Task force members expressed confidence in Alabama agencies willingness to accept O&M interns, but university training programs are not likely to view most Alabama programs as attractive intern placement sites at the present time.

E. SALARIES AND WORKING CONDITIONS - Salary levels in relation to work hours and work loads which are competitive with other agencies and organizations employing O&M specialist is important to success in recruiting. Schools systems for example are formidable competition in the recruiting challenge due to ten month pay contracts and ample holiday leave time. Though agency salaries may appear comparable to those offered through the school systems; when they are prorated per months on contract, and itinerant travel losses are considered, the agency setting may become highly unattractive. As one state agency in the REHABNET survey commented; "(We) believe (our) major difficulty in recruitment relates to competition with school systems which offer comparable or higher salaries under 9-10 month contracts."

Ironically, even though DRS is under the State Department of Education (SDE), school systems within the SDE are the most formidable instate competition for hiring O&M's. Upon sampling at random, one school system, the task force found that the beginning annual salary for an O&M graduate without proir experience was more than \$2,000 greater with the school system under a 10 month contract, than with DRS under a 12 month contract. This gap becomes even greater, when comparing salaries of those with increased education and experience, resulting in a 25% or greater pay disadvantage when calculated on a salary per time-worked basis.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. From the first settlers to the present day, the nation has evolved through various stages of development. The early years were marked by exploration and settlement, followed by a period of rapid expansion and industrialization. The American Revolution was a pivotal moment in the nation's history, leading to the establishment of a new government and the declaration of independence. The 19th century was a time of great change, with the Civil War and the Reconstruction era shaping the nation's future. The 20th century has been a period of significant progress, with the United States becoming a world superpower and a leader in many fields. The history of the United States is a testament to the resilience and ingenuity of the American people.

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OBJECTIVE III

Propose alternatives for meeting Orientation and Mobility needs in Alabama.

Review of Pertinent Literature

"Techniques for cane travel indoors, in quiet residential neighborhoods, small business areas, rural areas, shopping centers, and large commercial areas are taught, with each area requiring specific and detailed lessons. Lessons may also include use of public transportation systems, such as city and inner-city buses, taxis, trains, subways, and airports. Efficient cane travel involves a great deal of instruction, often requiring more than 200 hours of training..." (Hickman, undated [late 1980's?]).

"The advantage of itinerant mobility programs is that adults or children can be served in a wider geographic area by taking the service to where they are, eliminating the need for, and cost of, transportation to centralized locations. A major disadvantage is that instructors usually serve fewer students or clients resulting in higher program costs-per-person served... Students receiving instruction less than three days-per-week tend to make slower progress and require more frequent review.

"The high cost of delivering orientation and mobility services of good quality and in sufficient quantity cannot be argued as most of the instruction is on a one-to-one basis. Yet, in the long run, the cost benefits of orientation and mobility instruction are more highly cost-effective than almost any service we provide to visually impaired children or adults... The true cost-benefit from orientation and mobility instruction lies not only in direct dollar costs for the service itself, but also in benefit derived by the recipient and the positive impact on his family and productivity. Effective and independent orientation and mobility is a directly usable skill in the daily life of a visually impaired person. Good mobility skills may help the blind person to attain a higher level of education, and to obtain and retain employment. More important they impart a sense of accomplishment and independence that few other personal adjustment skills can. Another benefit is that the increased occurrence of blind persons functioning independently creates a positive attitude toward them in the community" (Crouse, 1980).

"Daily lessons are also of utmost importance for the progress of the client. In some cases where the student has become a fairly competent traveler, the daily instruction may be reduced to possibly three times a week. But certainly at the outset and through most of the training, I would insist upon daily instruction for every client in my program" (Malamazian, 1972, p. 119).

THE HISTORY OF THE UNITED STATES OF AMERICA

The history of the United States of America is a story of growth and change. It begins with the first settlers, who came to the continent in search of a new home. They found a land of vast resources and opportunities, but also one of many challenges. The early years were marked by conflict and struggle, as the settlers fought to establish a new society. Over time, the United States grew into a powerful nation, with a rich culture and a strong economy. The story of the United States is a story of resilience and achievement, of a people who have overcome many obstacles and built a great nation.

The United States has a long and proud history, and it is a country that has made many contributions to the world. It is a country of freedom and opportunity, and it is a country that has inspired people all over the world. The history of the United States is a story of hope and dreams, of a people who have built a great nation and a bright future.

"... If the mobility instructor finds that he is only able to work with his clients one or two occasions per week, he will find that the mobility program not only becomes a long drawn-out process, but also that the results are not nearly as positive as they would be if the clients could receive training five times per week" (Bohman, 1972).

"The itinerant mode of service delivery has proven to be extremely popular with and relevant to the aged...

"Orientation and mobility taught in the home community has proved to be most beneficial as expressed by student feedback and apparent results... (Schwab, 1977)."

"... [teaching] units may be needed for training in the areas of low vision, audition, proprioception, haptic perception, or in the area of posture and gait training. In some settings, other specialists such as occupational therapists, physical therapists audiologists, and classroom teachers may be available to take responsibility for some of these prerequisite areas. Where they are not, it usually falls to the mobility specialist to provide needed learning experiences if the client is to benefit as completely as possible from mobility training" (LaDuke & Welsh, 1980).

*****Link to discussion of advantages of residential/day/multi-disciplinary programs--HCC

"Statistics on caseloads must be viewed from both annual and daily perspectives to be properly understood. Some O&M specialists see clients for lengthy sessions over extended periods, while others see clients briefly for only a few sessions...

"Since O&M is taught on a one-to-one basis and 6 hours a day of teaching is the prescribed maximum of the National Accreditation Council for Agencies Serving the Blind and Visually Handicapped... it is not surprising that the mean daily caseload is under 6 persons and the mean annual caseload is about 30 individuals (p. 58).

"... Because so many O&M specialists are itinerant teachers, it is interesting to note the time they spend in transit. The mean monthly mileage for the 1985 sample of itinerant teachers was 683 miles (approximately 10 percent of the sample traveled more than 1,500 miles per month, and one individual from Alaska reported traveling 7,500 miles per month). The mean number of monthly hours spent in transit was 32, and almost 25 percent reported spending more than 40 hours (1 full workweek) per month in travel (p. 59).

"... the mean percentage of time spent in each of nine activities in which O&M instructors in the 1985 sample were likely to be engaged [was also studied]. Although most of these activities are not especially time consuming, they [communication, record keeping, professional development, supervision, program development, advocacy, in-service, and 'other'] add up to approximately 23 percent of the annual work time (plus roughly another 25 percent for travel), which leaves only a little more than 50 percent of the time for direct teaching. Taken together, the time available for

teaching and the one-to-one instructional requirement limit the alternatives for reducing the cost per instructional unit of O&M services (pp. 59- 60)" (Uslan, Hill, & Peck, 1989).

"... the need for professional training must be emphasized, for the mobility therapist takes the life and safety of his trainees into his hands...

"... it is not surprising to find many partially trained or even wholly untrained persons volunteering to show blind people how to get about. But to give a blind person confidence without proper and thorough training is worse than nothing.

"The proper use of this cane must be taught by a therapist especially trained in the Hoover cane technique; the cane is almost worse than useless without proper instruction. But with it, the average blind person can learn to move with independence, ease, and even grace (p. 140)...

"...many institutions and agencies still do not recognize the vital importance of mobility training, nor the necessity for training the blind person's senses on the one hand and training the therapist on the other..." (Carroll, 1961).

"... The issue of paraprofessionals or mobility aides is confused by a lack of consistency in terminology. When these terms are used to indicate mobility instructors who are trained through programs conducted by agencies, the issue is clear. Such agency-trained instructors do not meet the criteria currently established for mobility specialists by the profession. On the other hand, there is a category of personnel variously referred to as mobility aides, paraprofessionals, and other titles, whose training and responsibilities are limited...

"... To attempt to prepare individuals whose educational qualifications did not have to exceed that of a high school diploma for this wide range of functions does not seem to consider the needs of the visually impaired clients for quality services. Such shortcuts to quality training are frequently justified by citing the needs of multiply handicapped blind persons and older blind persons. It seems, however, that these clients might require the skills of the most capably trained instructors rather than the services of minimally trained 'aides' (pp. 639- 640)." (Wiener & Welsh, 1980).

"The role of the mobility assistant is primarily one of monitoring specified skills and must be carried out under the direct supervision of an AER-certified orientation and mobility specialist (p. 69)... (Wiener, Deaver, DiCorpo, Hayes, Hill, Manzer, Newcomer, Pogrand, Rosen, & Uslan, 1990).", [so any inclusion of mobility assistants does not negate the necessity of recruiting fully-trained O&M specialists].

"Only time will tell if mobility assistants will have a positive impact (p. 29)..." (Uslan, Hill, & Peck, 1989).

Task Force Observations

Five (5) options for orientation and mobility service delivery were discussed by the O&M Task Force. Discussions which examined the advantages and disadvantages of each type of service delivery are summarized below.

SERVICE DELIVERY OPTIONS:

1. Day programs are training programs in which services are offered at specific locations other than clients' homes, and which have no residential component. Clients travel to appointed training sites and travel home daily, and most often live in the same community in which the day program center is located. Transportation to the training location may be provided either by the training agency or by the client. Day programs can be offered in communities of any size. This service delivery option is seldom used in modern service delivery.

Advantages. More clients may be seen per instructor per day. Specialists are not required to log time driving to remote locations to meet with clients in their own home areas. Nearby working areas may be picked for consistent use with students, alleviating the need to search for appropriate spots in unfamiliar areas. Other professionals (occupational therapists, physical therapists, audiologists/speech therapists, psychologists, nurses or medical personnel, classroom teachers, etc.) may be available for consultation or intervention with accompanying or secondary problems or disabilities.

Disadvantages. Transportation tends to be problematic, and many elderly, multi-disabled, or poor clients are unable or unwilling to provide their own transportation. Locating O&M staff in a general rehabilitation facility rather than in a blindness rehabilitation facility presents the possibility of supervision of O&M specialists by persons who lack an intimate understanding of the process, which can lead to administrative limitations and leading to ineffective educational programming, practitioner burnout, and related problems. Monthly overhead costs for physical plant maintenance are significantly higher than itinerant or community-based services. If located outside a major urban area, the travel environment may not include features (elevators, escalators, revolving doors, congested business areas, multi-lane roads, busy traffic lights, etc.) necessary to development of advanced but necessary skills.

2. Residential programs are training programs in which clients are housed at a base location for the duration of training, with opportunities to travel home on weekends or holidays. Opportunities for training in home communities are limited by the distance of the home community from the residential site, as clients may often live outside the community in which the residential site is located. State schools, private agencies, and state agencies serving blind and visually impaired clients often operate residential programs.

All VA centers for blindness rehabilitation are residential in nature.

Advantages. More clients may be seen per instructor per day. Specialists are not required to log time driving to remote locations to meet with clients in their own home areas. Nearby working areas may be picked for consistent use with students, alleviating the need to search for appropriate spots in unfamiliar areas. Other professionals (occupational therapists, physical therapists, audiologists/speech therapists, psychologists, nurses or medical personnel, classroom teachers, etc.) may be available for consultation or intervention with accompanying or secondary problems or disabilities. Peer pressure may be used appropriately to effect significant behavior changes that might not be accomplished if the client were seen individually in a day program or community-based service delivery setting.

Disadvantages. Some client groups show a characteristic reluctance to leave the home area to pursue a rehabilitation program (elderly clients, some multi-disabled clients, and rural clients who do not wish to "go to the city", e.g.). Locating O&M staff in a general rehabilitation facility rather than in a blindness rehabilitation facility presents the possibility of supervision of O&M specialists by persons who lack an intimate understanding of the process, which can lead to administrative limitations and leading to ineffective educational programming, practitioner burnout, and related problems. Monthly overhead costs for physical plant maintenance are significantly higher than itinerant or community-based services. If located outside a major urban area, the travel environment may not include features (elevators, escalators, revolving doors, congested business areas, multi-lane roads, busy traffic lights, etc.) necessary to development of advanced but necessary skills.

3. Itinerant programs, sometimes called community-based programs, are training programs in which clients are served primarily in the home environment, with trips outside the home community only as needed to achieve valid educational objectives. Public school O&M programs tend to be itinerant in nature, and many states offer community-based O&M services.

Advantages. Some client groups respond best to being served in the home environment, among them the elderly, the very young, and some rural clients. Overhead costs for physical plant are lower than residential programs which must provide housing for clients during training. Motivation for use of skills in the familiar home surroundings is often high. Training programs specific to each client's individual needs can readily be developed with easy access to travel environments that are truly "real" to clients. Clients typically experience a greater sense of control over their rehabilitation programming when it occurs on "their turf", which can lead to a more productive and pleasant rehabilitation experience.

Disadvantages. Community-based programs tend to require more calendar time to achieve the same results as day programs or residential programs. Many clients receive positive benefit from completing rehabilitation training with a peer group to which they

can relate and with which they can interact, an experience not available to clients of itinerant programs. Much time and agency money is spent on travel. Practitioner time with clients is sharply limited by this program structure. Opportunities to consult or work cooperatively with ancillary or support personnel (occupational therapists, physical therapists, audiologists/speech therapists, psychologists, nurses or medical personnel, classroom teachers, etc.) are typically quite limited or virtually nonexistent.

4. Contracted services are services provided, usually per demand and at an hourly rate, by professionals who are not regular salaried or hourly workers on the payroll of the agency serving the client. Contract fee rates vary across practitioners, agencies, states, and/or regions, and are negotiated with individual practitioners or corporations. Instructional settings for contracted services may vary between day programs, residential programs, or community-based programs, but most often are provided according to the itinerant model.

Advantages. Clients in remote areas not accessible to day, residential, or itinerant programs may be served if a practitioner may be procured to provide services on a fee basis. Other advantages tend to be limited to those financial advantages that may be received by the serving agency: no overhead for residential day facilities, no need to maintain additional personnel on a payroll, and no obligation to provide fringe benefits except as specified by contract may be seen to be advantages by some agencies.

Disadvantages. Contract workers are few and far between. Only a handful of corporations have been established to provide contract services, and these tend to operate primarily in major metropolitan areas, so agencies seeking contract mobility specialists must often wait until an unemployed practitioner moves into the area. Otherwise, contract work is done primarily on off-hours by practicing specialists, and the quality of lessons may suffer due to time of day and limited availability. In addition, few practitioners are available for after-hours mobility training, even at lucrative rates, so quality services may not be available to clients at the most propitious time if a contract agent is not available. Contract services often result in greater overall cost.

5. Experimental use of O&M Assistants: The O&M profession, in response to consumer need and rehabilitation agency demand, is in the early stages of developing formal training programming for mobility assistants, as well as exploring parameters within which these paraprofessionally trained service providers will be used. No doubt it will be some time before the roles of mobility assistants are fully delineated and implemented, and there is evidence that the plan to use mobility assistants will not be acceptable to agencies serving the blind and visually impaired or to the major organized consumer groups representing blind persons.

Advantages. (Speculative). Advantages presumed to accrue from use of mobility assistants include the more effective use of O&M specialists' time by freeing them from inventory and some paperwork duties, as well as decreasing the amount of time the specialist must

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spend observing clients practicing basic skills previously introduced. Supporters claim that use of assistants will lead to more effective service delivery, as well as an increase in the quality of services.

Disadvantages. (Speculative). Disadvantages presumed to result from the use of mobility assistants can be characterized as a general lack of faith in the effectiveness of this service delivery model. Opponents state that the limited training afforded mobility assistants will not prepare them to adequately instruct clients, and that the lack of necessary observational skills on their part may lead to the establishment of bad habits or unsafe orientation and mobility practices on the part of clients. In addition, time spent supervising assistants would take away from the specialist's instructional time with clients. It is also presumed that many clients would find the receipt of instruction from more than one person less effective than the traditional one-on-one method.

PERSPECTIVE:

Historically, the residential model of O&M service delivery has been preferred by agencies serving the blind and visually impaired, beginning with the VA and continuing with the establishment of residential centers by both private organizations and public, largely state, agencies. Many state agencies currently operate residential facilities, while others have opted for itinerant or community-based O&M programs. Recent literature chronicles the growth of budgeted itinerant O&M positions in the public schools. Day programs and contract services tend to be less widely used, and the use of O&M assistants, if it is ever to be, belongs to the future.

Both residential and itinerant O&M services are currently available in Alabama, with contracted services are used to a limited extent. Task Force discussions focused on a comparison of the relative merits of residential programs versus community-based programs for a rural state such as Alabama.

Estimations of total teaching hours required to complete a comprehensive orientation and mobility training program range from 120 hours to 200 hours (Hickman, undated; McCloskey, 1990). The Veterans Administration Southeastern Blind Rehabilitation Center (VASBRC) located in Birmingham schedules two hours/day, five days/week per client, with instructional programs averaging approximately 120 hours in length. Each VA O&M specialist completes between 15 and 20 training programs per year (McCloskey, 1990). One-hundred fifty (150) hours of training was the average for veterans at Hines VA Hospital during Russell Williams' term as chief of blind rehabilitation services (Williams, 1972). These estimates reflect center-based services, which usually are delivered in a concentrated form lasting a minimum of 16-20 weeks as practiced by

the VA rehabilitation centers which pioneered orientation and mobility services. It is hard to argue that center-based O&M services are anything other than effective and relatively efficient.

Provision of services on a community-based or itinerant basis dictate that greater lengths of calendar time be spent with each client in order to attain the same levels of competency, especially if the instructing specialist is limited to one visit per week. Although one visit per week is contrary to the recommended minimum of three visits per week commonly accepted by professionals as best for clients (Malamazian, 1972), it is frequently the most often itinerant specialists in rural areas are able to visit clients. A 120 hours of instruction, based on the VA model delivered at one hour per week would take 30 months, or two and one-half years. 200 hours of instruction would take 50 months, or four years and two months. In addition, "knowledgeability of the mobility specialist in low vision will tend to increase training time. It appears that the more basic content knowledge the mobility instructor has, the less likely he is to cut the training program short. He is able to recognize the client's needs based on depth of understanding" (Apple, Apple, and Blasch, 1980). Clearly, instruction on an itinerant basis asks much of both client and mobility specialist, and only residential school or public school programs permit such lavish expenditures of time on individual clients, as they are the only programs that can legitimately expect to have access to clients for such a length of time. Yet, community-based programs remain the service delivery option of choice for most elderly citizens, as well as for others who may not be up to the rigors of residential placement, who plan to maintain a rural life-style, or who may be too young to benefit from an experience away from home.

It is clearly evident that the needs of all clients cannot be met by only one approach to service delivery. While some citizens are best served in the home environment, others may need the opportunity to interact with a peer group while pursuing rehabilitation goals. Residential facilities, to be effective, should be located in a large enough metropolitan area to provide the wide range of opportunities that allow consumers to become effective travelers in all types of unfamiliar environments, and should be accessible to all clients in the state. Community-based programs should be available to serve those whose needs cannot best be met in the residential setting. At this writing, only one agency in the state, the Mobile Association for the Blind, combines both types of service delivery in the same area of the state. Further examination of this concept, executed on a statewide basis, deserves serious consideration.

The Task Force did not reach consensus on a single, most effective service delivery option suitable for Alabama's diverse population of blind and visually impaired consumers, indicating that the most viable strategy lies in some combination of all possible approaches. No doubt private contracting will continue on a limited basis, and day programs may be only of limited effectiveness due to

difficulties with transportation, but the most effective strategy for meeting client needs undoubtedly is one that leaves all productive options open. Provision of both residential and itinerant O&M programs in appropriate locations, with the option to use contract practitioners, establish day programs, and initiate use of O&M assistants, would concurrently provide the widest range of opportunities, both for services receivers and service providers. The Alabama rehabilitation services network is broadly enough based and contains enough facilities across the state to initiate the widest possible range of O&M services if we commit to inter-agency cooperation and a long-term approach to program development. As agencies acquire additional O&M personnel, they could be plugged into a widening network of services designed to meet the differing needs of both clients and professionals. The more that Alabama's programs serving blind and visually impaired persons pursue true networking and sharing of resources, the greater the strides that can be made toward truly enabling all of Alabama's visually impaired children and adults to reach their maximum potential.

2. The second part of the document focuses on the implementation of the proposed changes. It details the steps involved in the transition process, from the initial planning phase to the final execution. This section also addresses the potential challenges and risks associated with the changes, providing strategies to mitigate them.

3. The third part of the document discusses the impact of the changes on the organization's overall performance. It highlights the positive outcomes achieved, such as improved efficiency and cost savings. This section also includes a comparison of the current state of the organization with the projected future state, demonstrating the benefits of the proposed changes.

4. The fourth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of the changes and the need for continued monitoring and evaluation. This section also includes recommendations for further actions to be taken to ensure the long-term success of the organization.

OBJECTIVE IV

Submit specific recommendations regarding how Agencies should proceed toward providing O&M services in Alabama.

After an extensive review of the literature and numerous task-force deliberations the following recommendations are made:

RECOMMENDATIONS

- A. Develop a comprehensive model for O&M service provision
- B. Eliminate identifiable recruitment disincentives
- C. Develop and articulate a plan for recruitment of O&M specialist

Appendix

DISCUSSION OF RECOMMENDATIONS

Within Objective II of this report the task force identified five major barriers to the adequate provision of orientation and mobility services in Alabama: 1.) the lack of a comprehensive model program, 2.) the lack of a state merit classification, 3.) employee job disincentives, 4.) inadequate administrative commitment or support, and 5.) unattractive salaries and working conditions.

The identified barriers mentioned above are addressed within the scope of the following task force recommendations.

A. DEVELOP A COMPREHENSIVE MODEL FOR O&M SERVICE PROVISION

After extensive study and discussion of identifiable problems related to recruiting, hiring, and retaining qualified O&M specialist the task force noted there is, "the lack of a clearly articulated, comprehensive, and systematic plan for O&M services in Alabama", and "agencies with a model which include a range of service delivery systems create better opportunities for recruiting".

Additionally, it was noted that O&M specialist, "tend to avoid working for agencies where supervision is not carried out by someone with knowledge and background in O&M. Programs with a demonstrated commitment to the field through hiring and promoting O&M specialist within their administration stand a better chance of attracting O&M graduates."

The above findings point out the value of a comprehensive service model for recruiting purposes, not to mention benefits related to quantity and quality service delivery.

In response to the above observations the task force feels strongly that:

1. Alabama agencies should develop a Model Plan for Orientation and Mobility Services that would address the variety of needs that exist within the various demographic subgroups of the blind/visually impaired population in Alabama. (See subgroups identified in Objective I).
2. Alabama agencies should design a system of services that is flexible and interactive across agency boundaries in a multi-provider system, to insure that blind citizens regardless of age, vocation status, etc., may be served.
3. The state of Alabama should develop a position for a state-wide consultant/supervisor responsible for carrying out

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and coordinating the state plan for orientation and mobility services.

4. A comprehensive model for orientation and mobility services should include some provision for addressing the low vision needs of clients in their travel environments. (Low vision rehabilitation services are not presently integrated into existing field services within Alabama).

B. ELIMINATE IDENTIFIABLE RECRUITMENT DISINCENTIVES

Among the five (5) significant barriers to recruitment within Objective II of this report three (3) of these pertain distinctly to personnel issues. The task force feels that these disincentives must be addressed forthrightly in order for Alabama to compete in the recruitment of O&M specialist. These three major personnel concerns are:

- * THE LACK OF A STATE MERIT CLASSIFICATION FOR O&M SPECIALIST
- * EMPLOYEE JOB DISINCENTIVES
- * UNATTRACTIVE SALARIES AND WORKING CONDITIONS

The task force makes the following recommendations in regard to these personnel concerns:

1. Develop state merit classifications and create positions for O&M specialist based upon position descriptions that reflect contemporary values and employment practices in the profession.

The task force strongly recommends that only certifiable orientation and mobility specialist be considered for employment. Statements suggesting unqualified people will be hired as O&M specialists should be removed from job announcements, position descriptions, and agency promotional materials and brochures. These position descriptions should be written to ensure the employment of qualified personnel.

2. The Alabama State Plan for Orientation and Mobility Services, should create permanent, full time, line item O&M positions, not dependent upon grant funds or other "soft" monies.

The task force suggest that if such positions are funded under a "Joint Service" type arrangements, employee job security could be enhanced if contracts were multi-year, as opposed to annual arrangements. Such contracts should be specific to clearly spell out lines of accountability, employee liability coverages, personnel benefits in comparison to state merit, and other legitimate employee concerns.

2. The second part of the document focuses on the implementation of the proposed changes. It details the steps involved in the transition process, from the initial planning phase to the final execution. This section also addresses the potential challenges that may arise during the implementation and provides strategies to overcome them.

3. The third part of the document discusses the long-term impact of the changes. It highlights the expected benefits, such as improved efficiency and cost savings, and provides a timeline for when these benefits are anticipated to be realized. This section also includes a discussion on the ongoing monitoring and evaluation of the changes to ensure they are meeting the intended goals.

4. The fourth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of the changes and the commitment of the organization to their successful implementation. This section also includes a call to action for all stakeholders to work together to ensure the changes are fully embraced and integrated into the organization's culture.

5. The fifth part of the document contains a list of references and a glossary of terms. The references provide additional resources for those interested in learning more about the topics discussed in the document. The glossary defines the key terms used throughout the document to ensure clarity and consistency.

3. Alabama agencies should conduct a survey to determine fair and competitive salary ranges for O&M specialist. Such a survey should include a comparison of state, regional and national salary ranges as well as employee benefits. Agencies within the state should make a special effort to compete fairly when establishing salary ranges for specific O&M jobs.

The task force noted that employee disincentives are an even greater barrier to recruiting experienced practitioners as compared to inexperienced practitioners. Typically, experienced practitioners are in greater demand, have more to offer, and can afford to be more selective in choosing their work environment.

Salary doubtless is important, especially in recruiting new practitioners, but working conditions are arguably more important, especially in terms of retention of personnel. Working conditions that tend to be important to orientation and mobility specialists include the academic and experiential backgrounds of supervisory personnel and their level of sensitivity to O&M concerns and issues, type of service delivery system (center-based, community-based, day programs, etc.), sizes of caseloads, amount of travel necessary or expected, amount of case closures per year, etc. Rehabilitation agencies would do well to compare school systems' salaries and VA salaries when recruiting, rather than comparing with other VR agencies who are also unsuccessful in recruiting O&M specialists, and these comparisons need to be conducted in such a way that they take into consideration working conditions, number of work hours, personnel benefits, etc. (Note discussion of this matter under Objective II of this report.)

C. DEVELOP AND ARTICULATE A PLAN FOR RECRUITMENT OF O&M SPECIALIST

1. The task force recommends the development of a recruitment plan for O&M specialist that includes both long-term and short-term strategies.
2. Such a plan should be visionary, and consistent with the Alabama State Plan for O&M Services.
3. Synchronization among state agencies wishing to hire O&M specialist is encouraged.
4. Such a plan should allow for the incorporation of O&M student interns.

Alabama agencies would benefit greatly from developing an internship placement program. In order for this to happen agencies will need to designate someone qualified to supervise O&M interns. These efforts will also be enhanced once the state develops a variety of placement sites in addition to those that are itinerant in nature. Placement of a trained O&M specialist in a

The second part of the document focuses on the role of the accounting department in the overall business operations. It highlights the department's responsibility for providing timely and accurate financial information to management and other stakeholders. The text also discusses the importance of maintaining good communication and collaboration between the accounting department and other departments within the organization.

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supervisory role would not only enhance the potential for procuring interns, but would also encourage recent graduates to consider more seriously accepting jobs in Alabama.

RELATED CONCERNS

Discussion of Alabama's O&M needs and potential strategies for meeting those needs also raised some related issues. The Task Force, recognizing their importance, discussed these issues, but chose not to fully address them at this time, as they fall outside the goal statement and objectives of the O&M Task Force. Their significance and the impact that they could have, both on programming and on client services, dictates that they be raised here. Literature excerpts and observations on the current state of low vision services and on the possibility of the initiation of a university O&M personnel preparation program in the Alabama area are therefore offered here, with the hope that they will spark further interest and discussion. Establishment of other committees to study these issues would seem prudent.

Review of Pertinent Literature: Low Vision Services

"... Unfortunately, many professional workers for the blind appear to have a blind spot in regard to the problems experienced by persons with low vision. They have regarded low vision as merely an anomaly of blindness. They have failed to recognize that persons with low vision are neither blind nor sighted, and that their condition is attended by unique problems which must be understood if they are to be helped" (Barth & Foulke, 1979).

"A... critical issue concerns the growing involvement of many mobility specialists in low vision. More and more mobility specialists are finding themselves in situations where the best way to help their clients become more proficient travelers entails lessons designed to help them learn to use their remaining vision more efficiently. With some clients this involves vision stimulation; with others, work with low vision aids and other optical devices. For many it is a combination of both approaches. Perhaps mobility specialists are filling a temporary gap in services that will be filled by vision specialists as the need for this type of direct instruction is more generally recognized (p. 643)." (Wiener & Welsh, 1980).

"Providing mobility services to low vision persons is a complex undertaking that ideally involves a number of disciplines and a number of skills, and possibly several settings... Low vision services are most effective when they are integrated and multi-disciplinary ...

"... Lesson plans for low vision programs have four distinguishing features. They will have a section devoted to instruction in the use of telescopes and other optical aids. They

will provide for night lessons. In addition to tactual and auditory cues, they will provide the use of visual cues and landmarks.

"Training in the use of the Galilean telescope most often falls to the mobility specialist...

"For some years to come, it is likely that many mobility specialists will find themselves working with low vision clients in setting where professionals from other disciplines are not readily available... (Apple, Apple, and Blasch, 1980).

"A good low vision training program should begin 'with a low vision examination, recommendations as to whether low vision aids will benefit the client, and a functional vision evaluation...' All become the responsibility of the orientation and mobility personnel who are adding low vision services to their mobility program (p. 122).

"... No way to prevent the partially sighted client from using his vision when he is alone and not wearing the blindfold has been developed to date. Instructors are also beginning to discover that this type of training does not necessarily give the client the 'big plus' when the blindfold is removed, as was once believed. Training the client in the use of his remaining vision concurrently with training him in the techniques of mobility has proven to be the best manner to enhance his travel ability (p. 124)." (Weesies & Head, 1972).

Observations

In the past fifteen to twenty years, professionals within the blindness rehabilitation community have begun to identify the differential needs of clients with useful residual vision as compared to the needs of those without sight, and a new corps of professional workers has been born. Established blindness workers from a variety of disciplines have acquired expertise in low vision issues, low vision devices, and teaching and intervention strategies. These low vision specialists, often professionally trained orientation and mobility specialists, teachers of the visually impaired, or rehabilitation teachers, first acquired additional knowledge, skills, and competencies, then changed the focus of services to low vision clients (fully 75- 80% of the clients of rehabilitation agencies serving the blind) from that of treating all clients with severe visual impairments as sightless to the more positive strategy of maximizing the use of all remaining senses, including sight. All current university "blindness workers" preparation programs include courses on low vision, and one university has established a degree program for specialization in low vision issues and services at the master's level. Low vision specialists have played a key role in the development of low vision services nationwide, and many agencies are operating low vision departments within their units serving the sensory-impaired.

Low vision services in the state of Alabama, with the exception of the VA Low Vision Clinic at SBRC in Birmingham and the work done by field practitioners whose primary job duties are in other areas,

tend to be prescriptive rather than rehabilitation services. Prescriptive services are those services which result in selection of low vision optical and nonoptical devices, are prerequisite or concurrent with rehabilitation services, and are often provided in an optometric clinic. Prescriptions most often provide field practitioners with a range of optical and nonoptical devices within which to work. Rehabilitation services are those services which prepare clients to make the best use of their remaining vision, accomplished by evaluation of functional vision and the teaching of specific techniques and strategies for use of selected optical and nonoptical devices. Rehabilitation services are most often provided outside the optometrist's office, and can be provided by blindness rehabilitation personnel with appropriate training and experience, often in cooperation with an optometrically-based prescribing clinic. At present, no agency serving the blind and visually impaired in Alabama, other than the VA, employs full-time low vision specialists to be responsible for clients' low vision needs. Serious consideration should be given to establishing at least one full-time low vision rehabilitation position within the Alabama blindness rehabilitation services network.

Review of Pertinent Literature: O&M Preparation Programs for Rural States

"Based on the successful history of the University programs that are training mobility specialists, Division IX of the Association for Education and Rehabilitation of the Blind and Visually Impaired reaffirms its support of these programs" (Blasch, 1990).

"... Unless state and private rehabilitation agencies and residential schools increase their salaries and benefits, they will find it more and more difficult to recruit university-trained O&M specialists. Therefore, it is likely to be in these settings that the shortage of personnel will be felt the most... One solution is a joint program between an agency and a university in which the university would train state employees. This approach would provide the agency with O&M personnel and would reduce the university's burden to recruit O&M students (pp. 28- 29)" (Uslan, Hill, & Peck, 1989).

"... Agency and school administrators, university faculty, and visually impaired consumers are faced with concerns that threaten adequate provision of services. All affected groups must realize that the problem will not go away unless a concerted effort is made to find new solutions to our problems. The time has come for all to work together to alleviate the personnel shortages...

"Aggressive recruitment activities must also be undertaken. Agencies and schools that are having difficulty locating qualified practitioners may want to recruit individuals to enter the

1. The first part of the paper discusses the importance of understanding the underlying structure of the data. This is particularly relevant in the context of machine learning, where the ability to identify patterns and relationships in the data is crucial for building accurate models. The paper then proceeds to describe the various methods used to analyze the data, including both traditional statistical techniques and more modern machine learning algorithms. The results of these analyses are presented in a series of tables and figures, which show that the proposed method outperforms the baseline methods in terms of both accuracy and computational efficiency. Finally, the paper concludes by discussing the implications of these findings for future research and practice.

2. The second part of the paper focuses on the evaluation of the proposed method. This involves comparing the performance of the method against a set of baseline methods, using a variety of metrics to assess its effectiveness. The results of these evaluations are presented in a series of tables and figures, which show that the proposed method consistently outperforms the baseline methods across all metrics. This suggests that the proposed method is a significant improvement over existing methods, and that it has the potential to be widely adopted in the field of machine learning. The paper also discusses the limitations of the proposed method, and suggests ways in which it might be improved in the future.

3. The third part of the paper discusses the practical implications of the proposed method. This involves considering the ways in which the method might be used in real-world applications, and the challenges that might be encountered in doing so. The paper also discusses the potential for the proposed method to be used in a variety of other contexts, beyond the specific application that was studied in the paper. Finally, the paper concludes by summarizing the key findings of the study, and suggesting directions for future research.

university programs. In recent months various agencies have taken the initiative of offering scholarships to individuals who would be willing to enter such training. Private and state agencies have recruited these individuals with the promise that they will work for the agency for a minimum of two years. Often these agencies can establish a working relationship with one of the universities and allow for shared financial assistance. The university will often offer the student a stipend and a percentage of the tuition, leaving the agency to supplement the remainder of the tuition expenses. Some agencies have been offering present employees these opportunities while others have been recruiting new individuals through the newspapers. Still others have offered this arrangement to individuals who have been volunteers at the agency or school (p. 13)" (Wiener & Bussen, 1987).

"As a viable supplement to traditional campus-based personnel preparation programs, university outreach training programs provide for meeting personnel needs previously underaddressed in rural areas. By providing for a 'home-grown' trainee population, outreach programs address recruitment needs for university programs as well as assist local rural agencies to fill vacancies and provide services to visually impaired... [consumers] (p. 173).

"... Organization of the O&M outreach program focuses on the special characteristics of local needs and resources. Planning requires personal interaction with top level administrators at the various... systems that would be involved. University personnel must travel to potential sites to work out procedures and service needs. Local entities, such as regional education service centers, cooperatives, and/or state commissions for the blind, work with university personnel to arrange and fund faculty travel, student recruitment, release of time, if needed, for students to attend class, and other provisions for class attendance.

"Federal and state grants, as well as grants from private foundations, are excellent sources of funding for outreach programs.

"... One reason for offering a teacher training program in rural areas is to fill vacancies in areas where service has been previously undeveloped or limited. Many rural areas have difficulty attracting professionals to fill vacancies.

"... O&M specialists indigenous to the area where they will work are aware of commonly used travel routes and opportunities and other relevant information.

"... Outreach programs can bring the curriculum to potential preservice educators who otherwise could not have the training" (Rosen & Sowell, 1989).

Task Force Observations

An orientation and mobility personnel training program in the Alabama area would be propitious for a number of reasons, and the rural outreach model described by Rosen and Sowell could well be a productive approach in a rural state such as Alabama. A local training program might serve as a potential source of practitioners

for recruitment, especially if students complete internships in Alabama. (Alabama programs would then need to be staffed to provide adequate supervision to interns. University training programs do not customarily send interns to be supervised by non-O&M-trained internship supervisors, or to itinerant programs, but this outreach method of personnel training might well allow for internship placements outside the traditional mold. Besides, all programs in Alabama except the DRS program and the AIDB Regional Center programs are staffed and structured so as to provide for internship placement and supervision.) In a similar vein, development of internship-supervision relationships with existing personnel preparation programs would be a productive step. Addition of a full-time O&M supervisor for DRS as recommended elsewhere in this report would make the establishment of such relationships more likely for that agency.

A university program providing specialists to deliver services to clients as well as instruction to future practitioners might be developed as another joint-service endeavor. Such a venture would provide some direct services to clients now, as well as developing the staff resources to continue needed expansion of service delivery in the future. Current interest on the federal level in the development of programs that involve networking or sharing of resources might make such a proposal both eye-catching and viable.

Perhaps Alabama should consider supporting another program in the southeast that already has federal funding for blindness and low vision issues, i.e., the Mississippi State University Research and Training Center on Blindness and Low Vision. This program, after all, is the only blindness rehabilitation preparation program in a bordering state, already has many of the needed training resources in place, and has a history of training and cooperative use of Alabama rehabilitation personnel. Having interns come in from out of state brings in fresh approaches and ideas, and can contribute in positive ways to agencies' growth.

Establishing relationships with existing university programs or initiation of a new program in or near Alabama can have a definite impact on both programs and clients, but we must take care not to view either of these strategies as panaceas. Both are long-term approaches that require significant expenditures of time before they begin to yield benefits, as a start-up period of time would be required before either option could begin to operate effectively.

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present. The author then goes on to discuss the various factors that have shaped the development of the United States, including the role of the government, the influence of the economy, and the impact of the culture. The author concludes by stating that the study of the history of the United States is a task of great importance, and that it is one that should be undertaken by all who are interested in the future of the country.

The second part of the paper discusses the role of the government in the development of the United States. It is argued that the government has played a central role in the shaping of the country, and that its actions have had a profound impact on the lives of the people. The author then goes on to discuss the various ways in which the government has influenced the development of the country, including through its control of the economy, its regulation of the industry, and its provision of social services. The author concludes by stating that the government is a powerful force in the development of the United States, and that it is one that should be carefully monitored and controlled.

The third part of the paper discusses the influence of the economy on the development of the United States. It is argued that the economy has played a central role in the shaping of the country, and that its actions have had a profound impact on the lives of the people. The author then goes on to discuss the various ways in which the economy has influenced the development of the country, including through its control of the production of goods and services, its regulation of the market, and its provision of employment opportunities. The author concludes by stating that the economy is a powerful force in the development of the United States, and that it is one that should be carefully monitored and controlled.

The fourth part of the paper discusses the impact of the culture on the development of the United States. It is argued that the culture has played a central role in the shaping of the country, and that its actions have had a profound impact on the lives of the people. The author then goes on to discuss the various ways in which the culture has influenced the development of the country, including through its control of the values and beliefs of the people, its regulation of the arts and sciences, and its provision of education. The author concludes by stating that the culture is a powerful force in the development of the United States, and that it is one that should be carefully monitored and controlled.

ALABAMA O&M TASK FORCE

Closing statement

In closing, the task force has examined many questions related to the field of rehabilitation, and orientation and mobility in specific. What is an orientation and mobility specialists? What do they do? Why do their services matter? Why does it matter how they are trained, and to what level they are trained? Why is there a shortage of personnel? How can agencies successfully recruit and retain them? How can programs best utilize them?

We trust that this report has in some measure illuminated the answers to these important queries. In our review of the literature, we came across the insightful remarks of Russell Williams, the chief of the first group of "orienters" to work at Hines Veterans Administration Hospital, Chicago, Illinois. Mr. Williams addressed the question, "What does it take to be an orientation and mobility specialist?", in this way:

"Covering large areas on foot hour after hour, day after day, always in the right position to observe fine details of the blind person's performance is an exacting skill. The mere shadowing without inadvertently guiding is no mean achievement. It takes genuine emotional strength to teach and observe people who have uncommonly strong doubts about what you are teaching as well as their own ability to absorb it, and, in addition, to do this before an ever-present public who has stupendous doubts about the wisdom, safety, and validity of your efforts (p. vi)." (Williams, 1980).

Our work on this task force report has been a meaningful experience as we've taken a close look at this whole area we call Orientation and Mobility. We hope this report will be enlightening and informative to all who share our interest in the safe and independent travel of persons who are blind.

THE HISTORY OF THE

REPUBLIC OF THE UNITED STATES

The history of the Republic of the United States is a story of growth and development. It begins with the first settlers who came to the New World in search of a better life. They found a land of opportunity and freedom, and they built a nation that has become a model for the world.

The early years of the Republic were marked by challenges and struggles. The young nation had to establish its identity and defend its interests against foreign powers. It was a time of great courage and sacrifice, and it was a time when the principles of liberty and justice were firmly established.

The history of the Republic is a story of progress and achievement. It is a story of the men and women who have shaped the nation, and of the events that have shaped its destiny. It is a story of the values and ideals that have guided the nation, and of the dreams and aspirations that have inspired it.

The history of the Republic is a story of hope and optimism. It is a story of the belief that a better future is possible, and of the determination to make it so. It is a story of the faith that the principles of liberty and justice will endure, and of the confidence that the nation will continue to grow and prosper.

SUMMARY

This task force report is by no means a definitive work containing all of the answers to the problem of providing adequate Orientation and Mobility services to the blind and visually impaired of Alabama. Perhaps it is, however, an intelligent starting place for those in authority to plan these much needed programs. It is, at least at this point, the most concerted effort disseminated within Alabama to attempt to evaluate and address these problems. The task force members share the belief that commitment, combined with informed opinion, can lead to relevant and meaningful program planning that will ultimately address the O&M needs of Alabamians.

It is clearly evident that the needs of all clients cannot be met by only one approach to service delivery. Some citizens are best served in the home environment, others may need the opportunity to interact with a peer group while pursuing rehabilitation goals. Residential facilities provide a wide range of valuable support opportunities for consumers; while community-based programs may be the best, and sometimes only viable option for others.

The Task Force did not reach consensus on a single, most effective service delivery option suitable for Alabama's diverse population of blind and visually impaired consumers; and perhaps the most viable strategy lies in some combination of all possible approaches. The most effective strategy for meeting client needs may be one that leaves all productive options open. Provision of both residential and itinerant O&M programs in appropriate locations, with the option to use contract practitioners, establish day programs, and initiate use of O&M assistants, would concurrently provide the widest range of opportunities, both for service receivers and service providers.

Though this report is not intended to answer all of the questions which administrators must face in addressing the O&M challenge, the task force is confident that following the major recommendations outlined under Objective IV, and restated below, will ultimately lead down a road to adequate programming.

Alabama Orientation & Mobility Task Force

RECOMMENDATIONS

- A. Develop a comprehensive model for O&M service provision
- B. Eliminate identifiable recruitment disincentives
- C. Develop and articulate a plan for recruitment of O&M specialist

The first part of the paper discusses the importance of the study and the objectives of the research. It also provides a brief overview of the methodology used in the study. The second part of the paper presents the results of the study and discusses the implications of the findings. The third part of the paper concludes the study and provides some final thoughts on the research.

The study was conducted in a laboratory setting and involved a series of experiments. The results of the experiments were analyzed using statistical methods. The findings of the study suggest that there is a significant relationship between the variables studied. The implications of these findings are discussed in detail in the paper.

The study was limited by several factors, including the sample size and the experimental design. Despite these limitations, the study provides valuable insights into the topic. Further research is needed to confirm the findings and explore the topic in more depth.

The authors would like to thank the following people for their assistance and support during the study: [Names of individuals]. The authors also would like to thank the funding agency for their support of this research.

The authors declare that they have no conflict of interest. The authors also declare that the data presented in the paper are accurate and reliable.

The authors have no other financial or non-financial interests that could be perceived as influencing the results of the study.

APPENDICES

APPENDIX A

BIOGRAPHICAL SKETCHES OF TASK FORCE MEMBERS

ALABAMA ORIENTATION AND MOBILITY TASK FORCE

BIOGRAPHICAL SKETCHES OF TASK FORCE MEMBERS

"...expertise is so dispersed, so specialized, so transient, and so essential in the competitive world marketplace that leaders are highly dependent on followers for much of the knowledge needed for survival...

"... the leader's trust in the group, and its members' trust in each other has led to the empowerment of the group, and reciprocally to its further empowerment of the leader." - (p. 5) --Smits, S. J. (1990). "Leadership and Followership: the Impending Paradigm Shift". Paper presented at the 1990 Southern Futurist Conference, May 19, 1990, Daytona Beach, Florida.

The twelve (12) persons listed below contributed their expertise to the task force report. These task force members represent a total of more than one hundred eighty-six (186) years experience in the fields of rehabilitation and special education, an average of greater than fifteen (15) each.

PHYLLIS BAKER

Ms. Baker is the Regional Director for AIDB's largest among nine regional centers throughout the state. This center works with children and adults in a five-county area, providing technical assistance, home intervention and center-based services for individuals as well as agencies. In the past Ms. Baker has worked in both public and residential school settings with children and adults. She has worked in special education for 15 years and with the sensory impaired for ten years.

Ms. Baker received her B.S. in Mental Retardation from the University of Alabama and an M.A. in Visual Impairment from the University of Alabama in Birmingham. She is currently working toward certification in administration.

She is involved in numerous local and state task forces and committees related to the needs of the sensory impaired. She is a member of AER and CEC.

HARVEY CLARK

Mr. Clark began his career in rehabilitation as a residential houseparent at the Arkansas School for the Blind. He subsequently pursued formal training resulting in teaching certifications in special education, elementary education, and middle school social studies. He holds a master degree in Orientation and Mobility from the University of Arkansas and is an AER-certified O&M Specialist.

Mr. Clark served an internship in O&M and Low Vision

THE HISTORY OF THE UNITED STATES

CHAPTER I. THE DISCOVERY OF AMERICA

It is a well-known fact that the first discovery of America was made by Christopher Columbus in 1492. He was an Italian explorer who sailed across the Atlantic Ocean in search of a new route to the East Indies. On October 12, 1492, he landed on the island of San Salvador in the Bahamas.

Columbus's discovery of America was a major event in the history of the world. It opened up a new world of exploration and discovery, and it led to the establishment of a new continent. The discovery of America was also a major step in the process of European colonization.

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Services at the Southeastern Blind Rehabilitation Center, Birmingham, AL. He was later employed as an O&M specialist at the Texas Education Service Center, Region XII, Waco, Texas; the VA Blind Rehabilitation Clinic, Waco, Texas; and Project OASIS, the Alabama Department of Education, Division of Rehabilitation Services.

Mr. Clark received a Performance Award from the VA Medical Center in Waco, Texas, 1987. He was recognized by the National Distinguished Service Registry, Rehabilitation Services, 1989. He serves as an Adjunct faculty member for Mississippi State University's National Research and Training Center on Blindness and Low Vision, " Specialists in Rehabilitation" program.

EMILY GARNER

Miss Garner has been a Rehabilitation Counselor for the Blind and Visually Impaired for five years. Before that she was a high school history teacher in Mobile, Alabama. Her responsibilities as a rehabilitation counselor involve assisting blind and visually impaired persons in planning and implementing a vocational program which includes vocational evaluation, medical assistance, training, and job placement.

Miss Garner received a B.S. in Counseling and Guidance from the University of Montevallo, an M.A. in religious Education from Southwestern Baptist Theological Seminary, and an M.S. in Rehabilitation Counseling from the University of South Alabama in Mobile. She is a Licensed Professional Counselor, and has memberships in NRA, ARA, AER, and is a board member of the Alabama Rehabilitation Counseling Association.

MICHAEL JONES

Mr. Jones is currently a Counselor for the Blind with the AIDB Regional Center in Birmingham, where he provides rehabilitation services. His previous employment includes serving as Volunteer Services Coordinator at the Lighthouse for the Blind in southern Florida and as Independent Living Specialist with the Independent Living Center in Birmingham.

He has a bachelor's degree with Advanced Studies in Rehabilitation Services Education from Auburn University. Organizations to which he belongs include the NRA, AER, CEC, and National Federation of the Blind. He also serves as chairperson of the Alabama Division of Rehabilitation Services Blind Advisory Board.

DAN KESSLER

Mr. Kessler is the Executive Director for the Independent Living Center in Birmingham Alabama. He is responsible for planning, budgeting, supervising, and evaluating Independent Living programs and services.

He was previously employed as social worker with the rehabilitation hospital in New Orleans, Louisiana, and as Program

Director with and Independent Living Center in New Orleans. Additionally he has worked as a Program Evaluator with a junior college program for hearing impaired students. Mr. Kessler has 15 years experience in the field of rehabilitation.

He holds a B.A. in Sociology from Purdue University, and an M.S.W. from Florida State University. He is a member of the Academy of Certified Social Workers, and a licensed professional counselor. His memberships include the National Association of Social Workers, NRA and ARA.

BILL MCCLOSKEY

Mr. McCloskey is the Supervisor of the O&M Section at the Veterans Administration Regional Blind Rehabilitation Program in Birmingham. He is responsible for coordinating the O&M training program and supervises mobility instructors and university interns. From 1973 to 1982, he was an O&M instructor for the VA Blind Rehabilitation program at the Hines Center in Chicago.

Mr. McCloskey received a B.S. in Health and Physical Education from Lock Haven State College in Lock Haven, PA. and an M.A. in Blind Rehabilitation, specializing in O&M, from Western Michigan University in Kalamazoo, MI.

He is a life member of AER. He has permanent certification as an O&M instructor and is also certified as an electronic travel aid instructor through AER.

VERA MCCLAIN

Ms. McClain has been a Rehabilitation Teacher for the State of Alabama Division of Rehabilitation Services since 1982. Her duties there include providing instruction and counseling for blind and visually impaired persons. Previous to this she served as an Assistant Professor in the Rehabilitation Teacher Training at Florida State University. Ms. McClain also served as the Executive Director of the Governor's Committee on Employment of the Handicapped in Tallahassee, Florida. Her career in the field of rehabilitation spans some 39 years.

Ms. McClain's degrees include a B.A. in Social Work from the University of Montevallo in 1952, an M.S. from Hunter College, New York, N.Y. and additional graduate work at the Overbrook School for the Blind and the University of Pennsylvania. She possess Rehabilitation Teacher Certification from AER.

Membership in professional associations include AER, the American Council of the Blind, the League of Disabled Voters, League of Women Voters, Positive Maturity, and NRA. Her activities within the ACB have included National Convention Program Chairman, National Membership Committee Chairman, Alabama Chapter President.

STELLA PELHAM

Ms. Pelham is currently employed as an Employment Specialist for the Division of Rehabilitation Services responsible

for developing employment opportunities for disabled applicants. She received her bachelor's degree in Psychology from Birmingham Southern College and her master's degree in Rehabilitation Counseling from the University of Alabama in Birmingham.

Ms. Pelham has nine years experience in the field of rehabilitation.

SUE SCHULGIN

Mrs. Schulgin is a Rehabilitation Teacher with the Division of Rehabilitation Services in Birmingham. Her duties are to instruct visually impaired and blinded adults in techniques for maintaining independence in daily activities. Her past employment includes work as a transcription typist for the World Bank in Washington, D.C. She has worked in the rehabilitation field for 18 years.

Her education includes a B.A. in Psychology from Anderson College in Anderson, Indiana, completion of the Russian Studies Course from Georgetown University, and graduation from the Braille Proofreader Course of the Library of Congress.

Her memberships include the Association for Education and Rehabilitation of the Blind and Visually Impaired, NRA, ARA, and BRA.

BARRY STEPHENS

Mr. Stephens has an eighteen-year career in the field of rehabilitation. His present employment is as the Coordinator of Project OASIS (Older Alabamians System of Information and Services) with the Division of Rehabilitation Services. Project OASIS assist visually impaired persons over age 55, with the goal of independent living. Mr. Stephens was previously employed with the Division of Rehabilitation Services as a counselor; having served a general caseload, deaf caseload and as counselor for the blind. He is both a Licensed Professional Counselor and Certified Rehabilitation Counselor.

Prior to his work with Project OASIS, Mr. Stephens was employed for ten years at the University of Alabama in Birmingham. During his tenure at UAB he served as an Assistant Professor, coordinator for the auditorily and visually impaired project, and director of the Human Resources and Counseling Center for the School of Health Related Professions. More recently he served as an instructor at Auburn University in the graduate program in Rehabilitation and Special Education, with emphasis on rehabilitation of the sensory impaired.

Mr. Stephens received his Ed.S. degree from UAB and his M. A. degree from the University of Alabama, in Rehabilitation Counseling. He also holds a certificate from the University of Tennessee OTD program, and has a B. S. degree in sociology from the University of North Alabama. He has served on the board of the Alabama Chapters of ARA and AER. He has served as president of the Alabama Chapter, and the Southeast Region, of the National Rehabilitation Counseling Association. He serves on the

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

2. In the second part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

3. In the third part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

4. In the fourth part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

5. In the fifth part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

6. In the sixth part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

7. In the seventh part of the paper the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β is solved. It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative.

Rehabilitation Counseling Association. He serves on the President's Committee for Employment of Persons with Disabilities and is on the editorial board of the Journal for Applied Rehabilitation Counseling.

LINDA WILSON

Miss Wilson is a Vocational Counselor for the Blind with the Division of Rehabilitation Services in Birmingham. She provides counseling and other necessary services to blind and visually impaired individuals to facilitate their becoming employed. Prior to her employment as a rehabilitation counselor, she was a resident advisor at the University of Alabama. She has been in rehabilitation work since 1976.

Miss Wilson earned her B.A. from Baldwin-Wallace College in Berea, Ohio and an M.A. in Rehabilitation Counseling from the University of Alabama.

Miss Wilson is an active member of NRA, ARA, BRA, and AER. She has served as President of BRA, secretary of AER, and served on the Talladega chapter of the Governors Commission on Employment of the Handicapped. Additionally, she has served on numerous task forces and committees related to services for the blind and visually impaired.

ELIZABETH ZIMMER

Ms. Zimmer is currently employed as a Mobility Specialist for the Jefferson County school system. She is a certified teacher of the visually impaired and an AER certified Mobility Specialist. She has worked as a mobility instructor since 1984, subsequent to a three year career of teaching visually impaired children.

Ms. Zimmer received her M.A. in special education with emphasis in Orientation and Mobility from Peabody College for Teachers at Vanderbilt University in Nashville, Tennessee. Her B.S. degree is in special education with emphasis in teaching visually impaired children from Illinois State University.

She is an active member in the Association for Education and Rehabilitation of the Blind and Visually Impaired.

APPENDIX B

SUMMARY OF REHABNET SURVEY

Alabama O&M Task Force

SUMMARY - REHABNET RESPONSE

On June 26, 1990 the Alabama O&M Task Force initiated an inquiry through the DRS REHABNET to determine the status of O&M needs and services within state rehabilitation programs nationwide. A total of nine (9) states responded to this survey and a summary of their information and comments is compiled below. Some states did not provide information in all categories of inquiry, and these areas have been left blank in the summary.

If one assumes that states which are proudest of there services to the blind are most likely to respond to such an inquiry; then it is sad to surmise that the results of this survey represents the high end of the continuum regarding O&M services in state rehabilitation agencies. It is obvious that great autonomy exist within each state and their subsequent approach to this challenge. It seems apparent, at least from this survey that few have done formal evaluation and planning toward tenacious resolution of the lack of these services to their clientele. The resounding message in the vast majority of cases is that the apparent needs far outstrip the current level of services.

FLORIDA

O&M's Employed: 6 of the 15 rehabilitation teachers located
throughout the state are also O&M specialist.
3 O&M specialists employed at a Rehab. Center.

Distribution: Some Rehabilitation Teachers in the field also O&M specialists.

DBS Rehabilitation Center located in Daytona Beach

Population Served:

Number Served Annually: Do not track the number of clients who receive O&M only.

Salary Ranges:

Qualifications:

Needs Documentation/Estimation: "...the need for adequate O&M services is outstripping the ability to provide quality services in a timely and efficient manner."

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Recruiting Strategies: "In order to alleviate this shortage...DBS has previously offered a work/study program in which staff rehabilitation instructors attended a special program at Florida State University culminating in a degree in O&M. We hope to offer this program again soon, possibly as early as this Fall."

Comments: Would be interested in knowing the results of this survey.

GEORGIA

O&M's Employed: Unspecified

Distribution: State Facilities
Community Based Facilities
Contracting with private company in the field

Population Served:

Numbers Served Annually: Current system not meeting all of the needs.

Salary: See "Comments" below.

Qualifications:

Needs Documentation/Estimation: Need documentation simply based upon services requested through VR counselors.

Estimate the majority of the 2500 clients served annually will need O&M services.

"With the growing number of the elderly population with visual problems, the need for some level of O&M services will increase."

Recruiting Strategies:

Comments: "We have had two vacancies at our Georgia Sensory Rehabilitation Center for sometime now. We feel the reason we can not attract certified O&M instructors here in state government is our low salary range."

Would be interested in knowing the findings of this survey.

ILLINOIS

O&M's Employed: 8 full-time

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1964

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES

FROM THE DEPARTMENT OF CHEMISTRY

RE: REPORT ON THE PROGRESS OF THE DEPARTMENT OF CHEMISTRY

FOR THE YEAR 1963

1. The Department of Chemistry has been fortunate in having a very successful year.

2. The following is a summary of the work done during the year.

3. The first part of the report deals with the work of the various research groups.

4. The second part of the report deals with the work of the department as a whole.

5. The third part of the report deals with the work of the department in the future.

6. The fourth part of the report deals with the work of the department in the past.

7. The fifth part of the report deals with the work of the department in the present.

8. The sixth part of the report deals with the work of the department in the future.

9. The seventh part of the report deals with the work of the department in the past.

10. The eighth part of the report deals with the work of the department in the present.

11. The ninth part of the report deals with the work of the department in the future.

12. The tenth part of the report deals with the work of the department in the past.

13. The eleventh part of the report deals with the work of the department in the present.

14. The twelfth part of the report deals with the work of the department in the future.

15. The thirteenth part of the report deals with the work of the department in the past.

16. The fourteenth part of the report deals with the work of the department in the present.

17. The fifteenth part of the report deals with the work of the department in the future.

Distribution: 5 center-based, 3 field-based

Population Served: Vocational and Elderly

Number Served Annually: 341 (198 working age, 143 elderly)

Salary Ranges: 24,828 - 32,544

Qualifications: Vary dependent upon setting.

Needs Documentation/Estimation: Estimate roughly 28,329 who need O&M services.

"Within consumer age ranges, the elderly in rural settings are clearly those who are most in need of services."

Recruiting Strategies: AER Job Exchange, visits to university training programs, and meetings with state O&M Association.

Have proposed 5 O&M staff levels consisting of: 1. Trained volunteer or family member; 2. O&M Assistant; 3. O&M Trainer; 4. O&M Instructor; 5. Senior O&M Specialist.

Comments: "...the ability to travel independently...is essential to the attainment of all other rehabilitation objectives..."

KENTUCKY

O&M's Employed: 1 (non-certified) at Ky. Rehab. Center for the Blind.

5 (certified) employed by school systems in Louisville and Lexington.

Distribution: Center or School based in Louisville & Lexington.

Population Served: Primarily center or school based.

Number Served Annually: In 1989 some 230 clients served through the Kentucky Rehabilitation Center for the Blind all received O&M evaluation and/or training.

In the Lexington area, counselors may contract privately with a certified O&M instructor at \$30 per hour plus 22 cents per mile.

Salary Ranges: \$20,400 - \$28,608

Qualifications: Must be certified through AER.

Needs Documentation/Estimation: Estimate 75-80% of severely visually impaired individuals could benefit from O&M training.

Project future need for 5 O&M specialist. Would like to hire an O&M Specialist in each of the 4 districts.

THE UNIVERSITY OF CHICAGO

THE DIVISION OF THE PHYSICAL SCIENCES

DEPARTMENT OF CHEMISTRY

PHYSICAL CHEMISTRY

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"The federal regulations governing our program states that... 'The state plan must assure that staff in sufficient number and with appropriate qualifications is available to carry out all functions'... Our lack of certified orientation and mobility instructors could potentially endanger continued federal funding of our program if we were reviewed and were not considered in compliance..."

Recruiting Strategies: Have requested and procured O&M positions through the state merit board. Use AER Job Exchange, University training programs, and the Journal of Blindness and Visual Impairment as sources for recruitment.

Believe major difficulty in recruitment relates to competition with school systems which offer comparable or higher salaries under 9-10 month contracts.

Comments: In Lexington, counselors may contract privately with O&M Teachers to provide services.

MAINE

O&M's Employed: Seven

Distribution: Throughout the state (itinerant)

Population Served: All ages, statewide. (1.2 million residents in Maine)

Number Served Annually: 4500 - 5000 client contact hours annually between 7 O&M specialist (Each instructor averages 55-60 client contact hours per month).

Average active caseload 8-14 individuals per month.

Salary Ranges:

Qualifications: All certified, university trained.

Needs Documentation/Estimation: Waiting list in 3 of 5 regions

Recruiting Strategies:

Comments: Mr. Paul Cote serves as statewide coordinator for O&M services.

O&M providers have quarterly meetings to discuss field issues and provide "professional development" time.

MINNESOTA

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

The second part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

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The eighth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

O&M's Employed: Unspecified

Distribution: Eclectic approach, utilizing center-based O&M instructors as well as itinerant service providers.

Population Served:

Number Served Annually:

Salary Ranges:

Qualifications:

Needs Documentation/Estimation: No "firm" data to drive service delivery model.

"Our service delivery model is currently based on historical precedent-what we did yesterday is what we will be doing today and, unfortunately, tomorrow."

Recruiting Strategies:

Comments: Would be most interested in receiving information gleaned from this survey.

TENNESSEE

O&M's Employed: 3 full-time staff
4 funded through private rehabilitation facilities

Distribution: 2 center-based out of Rehab. Center in Smyrna
1 itinerant out middle Tennessee office
4 positions funded at private Rehab. facilities
Additional O&M services purchased from private Contractors.

Population Served:

Number Served Annually:

Salary Ranges:

Qualifications:

Needs Documentation/Estimation: Undetermined

Recruiting Strategies:

Comments: "In 1984, our Commissioner appointed a task force, made

up of consumers and professionals in our field, to look at the Division's statewide facility services for the blind. One of the recommendations made by the task force was the need to expand community based itinerant services."

WEST VIRGINIA

O&M's Employed: Two

Distribution: Located in Rehabilitation Center

Population Served:

Number Served Annually:

Salary Ranges:

Qualifications:

Needs Documentation/Estimation: No formal study done.

Recruiting Strategies: AER Job Exchange and university programs.
Are sponsoring an agency employee to an approved university program for master's degree.

Comments: Would like to serve out of field offices in future.

WISCONSIN

O&M's Employed: None on payroll. Purchase from private providers.
Four O&M's employed by technical colleges.

Distribution:

Population Served:

Number Served Annually: No specific data being collected.
Estimate 50% of clients receive O&M.

Salary Ranges:

Qualifications:

Needs Documentation/Estimation: Estimate that 50% of the adult blind population served by the division need and receive some O&M training.

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DEPARTMENT OF CHEMISTRY
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RECEIVED
JAN 10 1964
FROM
J. H. DUNN
SUBJECT
POLYMERIZATION OF VINYL MONOMERS
IN AQUEOUS SOLUTION
AT 50°C
BY
J. H. DUNN
AND
J. E. HARRIS
PUBLISHED IN
JOURNAL OF POLYMER SCIENCE
PART A-2
VOLUME 2
PAGES 1-10
1964

ABSTRACT
The polymerization of vinyl monomers in aqueous solution at 50°C has been studied. The rate of polymerization is first order in monomer and first order in initiator. The rate of polymerization is independent of the concentration of the monomer. The rate of polymerization is independent of the concentration of the initiator. The rate of polymerization is independent of the concentration of the monomer. The rate of polymerization is independent of the concentration of the initiator. The rate of polymerization is independent of the concentration of the monomer. The rate of polymerization is independent of the concentration of the initiator.

Recruiting Strategies:

Comments: Four major sources of O&M services are:

- * North Central Technical College has 2 staff members who provide O&M to its students and members of the community;
- * Milwaukee Area Technical College has 2 employees who provide similar services;
- * Wisconsin School for the Visually Handicapped offers a 5 week summer program which includes O&M training;
- * Field office staff may purchase services from private contractors.

APPENDIX C

GLOSSARY OF TERMS

Alabama Orientation and Mobility Task Force

GLOSSARY OF TERMS

BLIND - Without sight or light perception.

LOW VISION - Visual impairment sufficient to significantly interfere with one's ability to perform common and necessary tasks within a visual context.

MOBILITY SKILLS - Locomotion from one position in space to another. The ability of walking in public places with a physical ease and mental confidence which allows one to blend naturally with one's fellow pedestrians. The physical or mechanical skills necessary to maximize safety during ambulation for blind or visually impaired pedestrians.

ORIENTATION AND MOBILITY SERVICES - Those services provided by orientation and mobility specialists that are required to engender in blind persons or persons with low vision safety and independence in ambulation and in the use of transportation systems via use of orientation skills and mobility skills.

ORIENTATION AND MOBILITY (O&M) SPECIALIST - A rehabilitation services worker whose academic speciality is rehabilitation of the blind, and whose professional training is specifically targeted toward development of expertise in teaching orientation skills and mobility skills to blind and/or visually impaired persons.

ORIENTATION SKILLS - Orientation may perhaps best be described as simultaneous selection of the most relevant sensory information from the travel environment while choosing, employing, and maintaining adequate safety skills. It is the least visible and most complex skill for independent travel, second in importance only to and coordinate with safety skills. Accomplished by the visually impaired traveler through the use of residual vision, as well as the following sensory modalities: auditory (hearing), tactual (feeling, including but not limited to long cane use), kinesthetic (movement), proprioception (awareness of limb(s) positioning), and olfactory (smell). Successful orientation involves the intelligent selection and prioritization of information from each of the above-listed sensory channels through mediating cognitive processes such as memory, interpretation of sensory input, logical sequential thought, the use of common route shapes, etc.

VISUAL IMPAIRMENT - A condition, medical or otherwise, resulting in a decrease in quality or amount of vision below that considered normal or below that required to perform common tasks within a visual context.

APPENDIX D

EXTENSIVE REVIEW OF LITERATURE

EXCERPTS FROM THE LITERATURE ON THE
HISTORY, THEORY, AND PRACTICE OF
ORIENTATION AND MOBILITY
TRAINING

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CHICAGO, ILL. 60637

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1890	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
	Apr 1	Interest		1.00	
	May 1	Interest		1.00	
	Jun 1	Interest		1.00	
	Jul 1	Interest		1.00	
	Aug 1	Interest		1.00	
	Sep 1	Interest		1.00	
	Oct 1	Interest		1.00	
	Nov 1	Interest		1.00	
	Dec 1	Interest		1.00	
1891	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
	Apr 1	Interest		1.00	
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	Dec 1	Interest		1.00	
1892	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
	Apr 1	Interest		1.00	
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	Sep 1	Interest		1.00	
	Oct 1	Interest		1.00	
	Nov 1	Interest		1.00	
	Dec 1	Interest		1.00	
1893	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
	Apr 1	Interest		1.00	
	May 1	Interest		1.00	
	Jun 1	Interest		1.00	
	Jul 1	Interest		1.00	
	Aug 1	Interest		1.00	
	Sep 1	Interest		1.00	
	Oct 1	Interest		1.00	
	Nov 1	Interest		1.00	
	Dec 1	Interest		1.00	
1894	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
	Apr 1	Interest		1.00	
	May 1	Interest		1.00	
	Jun 1	Interest		1.00	
	Jul 1	Interest		1.00	
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	Sep 1	Interest		1.00	
	Oct 1	Interest		1.00	
	Nov 1	Interest		1.00	
	Dec 1	Interest		1.00	
1895	Jan 1	Balance		100.00	
	Feb 1	Interest		1.00	
	Mar 1	Interest		1.00	
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"AER Resolution #88-5 "Adopted July 14, 1988--Montreal, Canada

"Whereas, independent mobility allows visually impaired persons to participate as fully as possible in educational and recreational programs, maintain employment outside the home, and meet social needs and obligations; and

"Whereas, orientation and mobility instruction provides visually impaired people with the skills necessary to move safely, efficiently, gracefully, and independently within any environment, familiar or unfamiliar; and

"Whereas, the Orientation and Mobility Instructors must be knowledgeable in the specific techniques of orientation and mobility as well as such areas as psychosocial issues, child development, concept development, sensory awareness and development, the nature and impact of additional handicaps, research, low vision, and educational and rehabilitative aspects of orientation and mobility services; and

"Whereas, university training programs in orientation and mobility which are approved by AER provide the necessary knowledge and skills in these areas; and

"Whereas, the certification standards of AER are designed to insure that Orientation and Mobility Instructors have received the necessary training and possess the necessary capabilities to provide adequate instruction;

"Now therefore be it resolved that AER reaffirmed its support for both university training in orientation and mobility and for the present AER certification standards and that a copy of this resolution be sent to the new Rehabilitation Services Administration (RSA) Commissioner, Sue Suter;

"And be it further resolved that AER urge all schools and agencies serving children and adults who are visually impaired to hire AER certified Orientation and Mobility Instructors."

--AER Resolution #88-5. (1989). Division nine--orientation and mobility

[newsletter], January 1989, p. 14. Alexandria, Virginia: Association for Education and Rehabilitation of the Blind and Visually Impaired.

"RESOLUTION #90-1

"WHEREAS, the ability to travel freely and independently is important to all persons and

"WHEREAS, assessment of the ability to travel safely, competently and independently is essential to the development of that ability for blind and visually impaired persons and

"WHEREAS, most blind and visually impaired persons can benefit greatly from orientation and mobility training and

"WHEREAS, there is a lack of orientation and mobility services available,

"BE IT RESOLVED that the Alabama Chapter of AER encourage agencies and organizations serving blind persons to make every effort to procure orientation and mobility services in the state of Alabama."

--Alabama Chapter, Association for Education and Rehabilitation of the Blind and Visually Impaired. Resolution #90-1. Adopted August 3, 1990, AER State Conference, Montgomery, Alabama.

2. The second part of the document focuses on the financial aspects of the organization. It provides a detailed breakdown of the budget, including income, expenses, and the resulting surplus or deficit. This section also discusses the various financial ratios and indicators used to assess the organization's financial health and performance.

3. The third part of the document addresses the operational aspects of the organization. It describes the various processes and procedures used to manage the organization's day-to-day activities, including procurement, production, and distribution. This section also discusses the various challenges faced by the organization and the strategies used to overcome them.

4. The fourth part of the document discusses the human resources aspect of the organization. It provides a detailed overview of the organization's workforce, including the various departments and the roles of the employees. This section also discusses the various policies and procedures used to manage the organization's human resources, including recruitment, training, and performance management.

5. The fifth part of the document discusses the legal and regulatory aspects of the organization. It provides a detailed overview of the various laws and regulations that apply to the organization, including those related to taxation, labor, and environmental protection. This section also discusses the various steps taken by the organization to ensure compliance with these laws and regulations.

6. The sixth part of the document discusses the marketing and sales aspects of the organization. It provides a detailed overview of the organization's marketing strategy, including the various channels used to reach the target audience and the various promotional activities used to generate sales. This section also discusses the various challenges faced by the organization in the marketing and sales areas and the strategies used to overcome them.

7. The seventh part of the document discusses the overall performance of the organization. It provides a detailed overview of the organization's key performance indicators (KPIs) and the various methods used to measure and analyze these indicators. This section also discusses the various factors that have contributed to the organization's success and the strategies used to maintain and improve its performance.

8. The eighth part of the document discusses the future prospects of the organization. It provides a detailed overview of the various opportunities and challenges that the organization is likely to face in the future and the strategies used to address these challenges. This section also discusses the various goals and objectives that the organization has set for itself and the steps taken to achieve them.

"At one time, severely visually impaired but not totally blind persons were either educated, trained, or rehabilitated as though they had no useful vision or were not considered in need of any special services at all...

"Fortunately, this situation has been changing rapidly since the mid 1960's. Interest in providing education and rehabilitation services tailored to the specific needs and problems of persons with low vision is growing (p. 187).

"Following the establishment of the first university programs to train mobility specialists in 1961, the numbers of agencies and schools that provided mobility training to clients grew quickly... Mobility specialists began to encounter clients who obviously had useful vision which with training could be used for travel. As early as mid-decade, ...it was apparent that mobility techniques developed for the totally blind were not entirely appropriate for the low vision person... Concurrently, the relationship of distance vision to mobility began to be examined (p.189- 190)...

"The first national conference on low vision and mobility was held in 1970 in San Francisco under the sponsorship of the U.S. Office of Education... the conference was multi-disciplinary in nature and was the first concerted effort to deal with the distance use of small amounts of vision... The primary purpose of the conference was to lay a sound basis for the use of techniques and knowledge developed by perceptual psychologists, ophthalmologists, optometrists who dealt with visual training and perceptual problems, educators of low vision children, educators of the perceptually handicapped, and mobility specialists who had worked with low vision clients. Major areas covered by the conference were: characteristics of eye conditions related to low vision, measurement of visual effectiveness, effects of severe visual impairment on psycho-social behavior, functional assessment of low vision visual perception as it relates to low vision, and training methods for increasing visual effectiveness. This conference greatly stimulated interest in providing mobility training for low vision clients. It firmly established the need for information from a variety of disciplines and the concept of the multi-disciplinary team approach to the rehabilitation of the low vision client (p. 190).

"Today, most university programs for the training of professional rehabilitation personnel for the visually impaired emphasize low vision along with total blindness either in special courses or integrated into all other courses. Administrators of low vision clinics have begun to recognize the value of providing mobility training to clients who need it...

"Providing mobility services to low vision persons is a complex undertaking that ideally involves a number of disciplines and a number of skills, and possibly several settings... Low vision services are most effective when they are integrated and multi-disciplinary (p. 191)...

"Ideally, the mobility specialist will provide travel training to a low vision client as a member of a multi-disciplinary rehabilitation team that includes clinical vision specialists, social workers, educators, etc. While such situations do exist,... low vision services are not easily

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available in all parts of the country nor are they all comprehensive and multi-disciplinary in nature... For some years to come, it is likely that many mobility specialists will find themselves working with low vision clients in setting where professionals from other disciplines are not readily available...

"Mobility specialists will also have to contend with the confusion surrounding the definition of low vision and the profusion of terms used to describe the condition itself and the people who have it... Low vision has come to be accepted as the term that best describes the condition that has been called in the past, partial sight, cecutiency, residual or remaining vision, near blind, purblind.

"... None attempt to categorize a person with low vision in terms of specific acuity and field defects levels; by implication, all four suggest the presence of useful vision; they suggest that the person with low vision encounters problems in daily functioning that stem from the visual deficit (p. 193).

"The mobility specialist must also appreciate the newness of training persons to use small amounts of vision, the resulting lack of an accepted best practice, and especially how this relates to difficulties in understanding the extraordinarily diverse low vision population. There are persons whose vision becomes severely impaired later in life. Some low vision persons are identified (and treated by) themselves and others as blind. Some are identified by others and identify themselves as sighted. There are a wide variety of physical reasons for low vision. Even when the physical visual problem is identical, the functional problems it creates can vary widely from person to person... A wide variety of psychological characteristics, differing in kind from those experienced by the totally blind, also affect the functioning of persons with low vision (p. 194).

"An appropriate mobility training program for a low vision person must be preceded by assessment of the client's visual functioning. This is particularly true in view of the wide range of visual conditions represented within the group labeled as low vision persons...

"There are three major ways to assess visual functioning: clinical assessments, self-reports of visual functioning, and functional vision assessments. All of these methods must be used for every low vision client. Special attention must be given to the interaction between the information obtained through each method and any discrepancies that result from the various methods (pp. 194- 195).

"The three methods of assessing visual functioning of the person with low vision should not be perceived as alternative methods of accomplishing the same thing, but rather they should be regarded as complementary methods each of which should be included in the ideal effort to determine visual functioning. Traditional clinical measures are designed to preclude existing compensatory mechanisms on the part of the individual, and, therefore, measure visual deficiency and not the ability to overcome the deficit. The mobility specialist as well as the special educator or other rehabilitation specialists are oriented toward assisting the person to compensate for the visual loss and therefore they must focus not only on the loss but also on the person's ability to compensate for the loss (pp. 199- 200).

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
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RECEIVED
JAN 10 1964
FROM
DR. J. H. GOLDSTEIN
SUBJECT
POLYMERIZATION OF VINYL MONOMERS
IN AQUEOUS SOLUTION

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"Mobility specialists familiar with the fundamentals of orientation and mobility training for the totally blind will find that they are making differential decisions in four basic areas, length of training, use of the blindfold, and development of lesson plans, when they begin planning special programs for low vision persons (p. 200).

"... Knowledgeability of the mobility specialist in low vision will tend to increase training time. It appears that the more basic content knowledge the mobility instructor has, the less likely he is to cut the training program short. He is able to recognize the client's needs based on depth of understanding.

"... Use of the blindfold... is not a true simulation because it deprives the person of visual cues at night...

"Non-use of the blindfold allows for the organized presentation and solution of low vision problems experienced by low vision persons (p. 201)...

"The cane has several uses in the mobility training of low vision persons... Functional vision evaluation should be designed to illustrate need for the use of the cane in ordinary travel situations to both the instructor and the student. Night lessons are frequently the most important deciding factor of need for cane travel skills. There will be a tendency for persons with lower acuity to utilize the cane for both day and night travel. Persons with peripheral field losses will use the cane somewhat more for night travel than day travel... The collapsible cane is frequently utilized as a ready explanation to the public that the user cannot see normally, and is for occasional use. There will be certain situations and environmental conditions, for example, under poor lighting conditions, unfamiliar areas, or unusual terrain when it will be advisable for the client to make use of his cane technique even though he is capable of traveling without it in most ordinary circumstances.

"... Lesson plans for low vision programs have four distinguishing features. They will have a section devoted to instruction in the use of telescopes and other optical aids. They will provide for night lessons. In addition to tactual and auditory cues, they will provide the use of visual cues and landmarks. Routes of travel will be selected for their visual content, as well as to meet skill-building requirements (pp. 201- 202).

"Despite the interest in the mobility problems of low vision persons, skills in prescribing optical aids for distance vision in general, and for mobility in particular, lag well behind the prescription of such aids for reading and other close work (p. 205)...

"Training in the use of the Galilean telescope most often falls to the mobility specialist...

"Both the prescribing specialist and the mobility specialist will probably take an active part in the final selection of an appropriate telescope(s) following some general guidelines which have been found to suit client needs (p. 207)...

"No matter what the prognosis for vision is, it is impossible, impractical, and possibly deleterious to educate a person for eventual loss of sight... This applies even to low vision persons with progressive disorders such as diabetic retinopathy that can lead to total blindness...

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"The mobility specialist should concentrate on the technical and social skills that will allow the low vision person to function more independently and productively with his present level of impaired vision. While the specialist should not encourage the client to dwell on the possibility of return of vision, neither should he attempt to train for further loss of vision without strong clinical evidence.

"... The low vision person's understanding and/or ability to articulate what he sees frequently poses communication difficulties with the mobility specialist and others. Low vision persons tend to find it easier and more profitable to explain the limitations arising from their poor vision to only those people with whom they work every day or meet frequently socially, rather than to persons with whom they come into contact on a more casual basis (pp. 213- 214).

"The mobility specialist should not be discouraged if several meetings with the client are necessary before motivation for training appears. An initial contact might give the mobility specialist the impression that motivation is lacking and attitudes are negative while further meetings and exploration may reveal capabilities and goals in the client that had not appeared earlier. The mobility specialist must constantly evaluate and frequently revise his expectations of the client to correlate with training, counseling, visual equipment, feedback, adaptations, and learning (p. 216).

"The very act of seeing with residual vision can create stress. It can be physically and psychologically tiring... Yet its efficiency and range make vision by far our most effective sensory modality. Even when restricted it still can be very effective in enabling a person to gather needed information. The better we can aid a person in understanding its limitations and finding the best methods to use this remaining vision, the more effectively he will be able to function.

"... Knowledge about the special services needed by persons with low vision and the ways in which these services are best provided is growing. Rehabilitation professionals, including mobility specialists, will find that the percentage of their clients who have some useful vision keeps expanding. Because they are trained to help a client make use of all sensory cues for the purpose of improving functioning..., mobility specialists can play a pivotal role in the development of low vision services...

"The interdisciplinary approach to the treatment of low vision clients should address itself to two highly significant issues which were identified and developed by a committee of low vision persons themselves: The low vision person's right to make full use of vision through the provision of all necessary aids, services, and techniques; and the low vision person's right to recognition of his capabilities, potential, and needs.

"The possibilities for successful rehabilitation of low vision persons when the appropriate interdisciplinary approach is used are clear. There is no other disability group in which such great improvements in functioning can be obtained by a majority of the population. Using prescribed techniques, the cost of rehabilitating a low vision person is usually far less than the cost of leaving him with his disability. Measured in terms of return of function, comprehensive low vision services are highly cost-effective (p. 218)."

--Apple, M. M., Apple, L. A., & Blasch, D. (1980). Low vision. In

Welsh, R. L., & Blasch, B. B. (Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 187- 223.

"One final area to avoid, though in many cases the new mobility instructor will have little say in the matter, is that of entering employment where one's direct supervisory personnel know little or nothing about the techniques, requirements, or idiosyncrasies involved in a mobility program, and worse yet, are unbending in their acceptance of present day techniques being taught the mobility student... Where such a situation does arise, the mobility specialist must work to provide a good in-service educational program to be offered to the supervisory personnel and strive for cooperation. If the mobility specialist is not successful in his efforts, that is to the degree that lack of cooperation interferes with accomplishing the objectives he has set regarding his program, then it might become necessary for him to direct his efforts elsewhere, where his time will benefit more clients. Mobility specialists are scarce, not their jobs (p. 124)."

--Aust, Adrienne. In Head, D. N. (1972), Procedures for the activation of an orientation and mobility program. Blindness, 117- 128.

"... Unfortunately, many professional workers for the blind appear to have a blind spot in regard to the problems experienced by persons with low vision. They have regarded low vision as merely an anomaly of blindness. They have failed to recognize that persons with low vision are neither blind nor sighted, and that their condition is attended by unique problems which must be understood if they are to be helped. Persons with low vision have often been treated as if they were blind. They have not been taught to take advantage of useful vision, and as a result, they have not realized their full potential (p. 43)..."

"The blind man's cane provides proprioceptive preview, and Hoover... developed the 'long cane' and the technique for using it in order to make this kind of preview more reliable. The blind pedestrian who employs the Hoover technique extends the long cane forward and swings it from side to side, lightly touching the surface at each end of the arc described by the tip. Used in this manner, the long cane explores the space into which the blind pedestrian will move, and its lateral swing is coordinated with walking in such a way that its tip will always test the surface area to be occupied by the blind pedestrian's foot on the next step. The proprioceptive preview provided by the long cane is approximately 25.98" [66 cm], or the length of one step at a normal walking speed of 3 mph. [4.83km/h]. A preview distance of 66 cm affords a preview time required for adequate performance on tracking tasks under optimum conditions (p. 44)..."

--Barth, J. L., & Foulke, E. (1979). Preview: A neglected variable in orientation and mobility. Journal of Visual Impairment and Blindness, 73, 41- 48.

"In the rehabilitation center, intensive mobility instruction almost invariably takes much of the trainee's time... mobility instruction includes skills in finding one's way toward more and more distant and difficult goals, usually by cane travel. Where appropriate, the trainee

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. From the first settlers to the present day, the nation has evolved through various stages of development. The early years were marked by exploration and settlement, followed by a period of rapid expansion and industrialization. The American Revolution and the Civil War were pivotal moments in the nation's history, shaping its identity and values. The 20th century brought significant social and political changes, including the rise of the federal government and the struggle for civil rights. Today, the United States continues to face new challenges and opportunities, reflecting its ongoing journey as a nation.

The American Revolution was a turning point in the nation's history. It was a struggle for independence from British rule, fought between 1775 and 1781. The revolution was led by a group of patriots who believed in the rights of the colonists to self-governance. The war ended with the signing of the Declaration of Independence in 1776 and the Constitution in 1787. The Civil War, fought between 1861 and 1865, was a conflict over the issue of slavery. It was a war of blood and fire that ultimately led to the abolition of slavery and the preservation of the Union. The war was a defining moment in American history, shaping the nation's future and its values.

The 20th century was a period of great change and growth for the United States. The nation emerged as a world power, playing a leading role in the two world wars. The Great Depression of the 1930s was a major challenge, but it was overcome through the efforts of the federal government and the American people. The civil rights movement of the 1950s and 1960s was a struggle for equality and justice, led by figures like Martin Luther King Jr. The space race of the 1960s was a competition between the United States and the Soviet Union to reach the moon. The Vietnam War was a controversial conflict that ended in 1975. The 20th century was a time of both triumph and tragedy, but it was also a time of great progress and achievement.

The 21st century has brought new challenges and opportunities for the United States. The September 11 attacks in 2001 were a major event that shaped the world. The war in Iraq and the war in Afghanistan were conflicts that tested the nation's resolve. The 2008 financial crisis was a global event that had a significant impact on the United States. The rise of the internet and social media has changed the way we live and work. The 2020 presidential election was a historic moment, with Joe Biden becoming the 46th president of the United States. The 21st century is a time of great change and uncertainty, but it is also a time of great potential and hope.

is also taught use of public vehicles such as bus, subway, train, etc. For some, use of a guide dog is the preferred mode of travel; here again intensive training of dog and master together is a necessity. The close relationship between the mobility instructor and the blind client often makes that instructor an important influence toward independence in ways not directly related to mobility, something of a counselor, and certainly an individual who can contribute major insights to the rehabilitation evaluation team (p. 173)."

--Bauman, M. K. (1980). Evaluating the rehabilitation patient through psychological and other diagnostic procedures. In Hoehne, C. W., Cull, J. G., & Hardy, R. E. (Eds.) Ophthalmological Considerations in the Rehabilitation of the Blind, 164- 175.

"... for most of us, going up or down a curb requires no thought at all; it must always require a certain amount of concentration when one cannot see that curb. With the best of cane technique, one must locate the curb and react to that cane. There is a far more complex process involved even for a good traveler. That dependence which limits a person to going when a friend is willing to go; that dependence which makes the individual ask for help when he would so like to be independent--this certainly has a psychological impact upon what would like to be a very free and independent spirit (p.158)."

--Bauman, M. K. (1972). Research on psychological factors associated with blindness. In Hardy, R. E., & Cull, J. G. (Eds.) Social and Rehabilitation Services for the Blind. Springfield, Illinois: Charles C. Thomas, 153- 173.

"What an easy job mobility specialists would have if all we had to do was present a visually impaired person with a cane, teach them a few basic cane techniques, and off they would go--safe, independent, relaxed travelers. However, it is much more involved than that. Most congenitally blind persons need to understand spatial concepts before they are ready to 'hit the streets.' They may lack knowledge of these concepts because of experiential deprivation or overprotection while growing up, or for other reasons. Others who are adventitiously blind or have lost their vision after having had enough residual vision to recognize and interpret their environment, experience a real fear of traveling independently because 'they know what is out there.' (p. 403)."

--Blakeslee, R. (1977). Overcoming resistance to mobility training. Journal of Visual Impairment and Blindness, 71, 403- 405.

"The ability to move independently, safely, and purposefully through the environment is a skill of primary importance in the development of each individual. Until confronted with temporary or permanent restrictions on this ability, people seem to take for granted a skill which occupies a central place in their growth and functioning. Orientation and mobility instruction is the process of helping visually impaired individuals develop or reestablish this skill. This instruction is the responsibility of the Mobility Specialist (also referred to as orientation and mobility instructors and peripatologists)...

"... areas of instruction include but are not limited to concept development, auditory training, orientation and wayfinding, use of

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud.

2. The second part of the paper examines the various methods used to collect and analyze data. It compares different techniques and discusses their strengths and weaknesses. The author argues that a combination of methods is often the most effective way to gather reliable information.

3. The third part of the paper focuses on the challenges of data analysis. It discusses the difficulties of interpreting large amounts of data and the importance of using statistical methods to draw valid conclusions. The author also discusses the need for transparency in the analysis process.

4. The fourth part of the paper discusses the ethical implications of data collection and analysis. It argues that researchers have a responsibility to protect the privacy of the individuals whose data they are using and to use the data only for the purposes for which it was collected.

5. The fifth part of the paper discusses the future of data collection and analysis. It predicts that the use of big data and artificial intelligence will continue to grow and that these technologies will revolutionize the way we collect and analyze data.

6. The sixth part of the paper discusses the importance of public participation in the data collection and analysis process. It argues that the public has a right to know how their data is being used and to have a say in the way it is collected and analyzed.

7. The seventh part of the paper discusses the need for international cooperation in data collection and analysis. It argues that data is often collected and analyzed across national borders and that international cooperation is essential to ensure the integrity and reliability of the data.

8. The eighth part of the paper discusses the importance of ongoing monitoring and evaluation of the data collection and analysis process. It argues that the process should be regularly reviewed and updated to ensure that it remains effective and efficient.

9. The ninth part of the paper discusses the importance of training and education in data collection and analysis. It argues that researchers and analysts need to have the necessary skills and knowledge to collect and analyze data effectively.

10. The tenth part of the paper discusses the importance of transparency and accountability in the data collection and analysis process. It argues that the public has a right to know how their data is being used and to have a say in the way it is collected and analyzed.

orientation aids and mobility devices, low vision training for mobility, and special considerations for pre-school and multiply handicapped individuals. These ... areas of orientation and mobility instruction were developed by mobility specialists who received professional training from one of the University training programs...

"Visually impaired individuals around the world are benefitting from the pioneering efforts of the Veterans Administration and the continued research and refinements evolving from the University training programs and the mobility specialists graduating from these programs.

"Based on the successful history of the University programs that are training mobility specialists, Division IX of the Association for Education and Rehabilitation of the Blind and Visually Impaired reaffirms its support of these programs (p. 9)."

--Blasch, B. (1990). Position paper: University trained mobility specialists. In Professional Issues Committee Report, AER Division Nine Newsletter, June 1990, p. 9. Alexandria, Virginia: Association for Education and Rehabilitation of the Blind and Visually Impaired.

"Full documentation of the teaching system begun by Hoover requires a description of action and events by which it fanned out to agencies beyond the Veterans Administrative system.

"Enough has been written, perhaps, concerning Hines as a culture for orientation and mobility. However, the degree to which it accumulated respect during the 1950's may be further illustrated by the stream of visitors --observers from work for the blind-- who made arrangements to view the program at first hand for several days or weeks... These visits served chiefly to whet the appetites for a much more thorough indoctrination and training. Often the agency heads who had arranged for their staff to go to Hines had hoped they would return, having mastered whatever techniques were in use and could without undue effort mold them into the agency program. Almost invariably these hopes were doomed to disappointment. A healthy unrest about the exacting nature of the necessary background and skills for teaching orientation and mobility thereby was generated and spread in work for the blind.

"This unrest culminated in a conference held at the American Foundation for the Blind in June 1959 (p. 9)..."

"It was the consensus of the conference that it would be necessary for mobility instructors to have a graduate training period of at least one year in an established and recognized setting. Practitioners at the conference, without animus, declared they could not support the training of mobility instructors on a short-term basis, however concentrated. Necessary emotional conditioning was so intricate a process, the ingrainig of principles through time-consuming laboratory experience so necessary, that the needs of the situation could not be met in a compressed teaching program of two weeks, two months, or even four months.

"... the need for a year's training gained substance, as the necessity for practical laboratory experience was taken into account. Obviously, the demands of the situation would be a deep identification with blindness and something of what it entailed on a basis so intimate and particular that the instructor would gain the habit of thinking all the time about how to manage problems of living without sight. This would entail living through a number of stages of identification while acquiring techniques (p. 10)..."

"Mention should be made of students from foreign lands who have come for professional preparation... In retrospect, it is truly phenomenal how the discipline of orientation and mobility has spread throughout the world in such a relatively short time..."

"The fan-out of orientation and mobility services throughout the world has been gratifying. It lends some credence to an old adage, 'Develop a superior product and the world will beat a pathway to your door'. It has had an enormous impact in the rehabilitation process of blind individuals; it has brought about changes in the educational process of blind children; it has helped raise work with the blind to a professional status (p. 17)..."

--Blasch, D. (1971). Orientation and mobility fans out. Blindness, 9-18.

"... If the mobility instructor finds that he is only able to work with his clients one or two occasions per week, he will find that the mobility program not only becomes a long drawn-out process, but also that the results are not nearly as positive as they would be if the clients could receive training five times per week (p. 124)..."

--Bohman, R. V. In Head, D. N. (1972), Procedures for the activation of an orientation and mobility program. Blindness, 117- 128.

"The person who suddenly loses sight (and only by considering a sudden and total loss can we see how complete this blow can be) is immobilized. He is fixed, rooted, confined to the spot on which he stands. He has lost one of the first marks of his infant development--the power to walk. And he stands held by panic and fear--yawning openings around him, threatening protruberances. Alone, he is being watched. Surrounded, he is cut off. He is without security, without maturity, without ability--a terribly dependent being..."

"But for every normally active adult who is blinded, the loss of mobility is a major loss. For mobility means more than walking. It means getting from place to place, by all the normal means which human beings regularly take advantage of, both in small spaces such as the room or home in which we live or work and in local or extensive geographical areas (p. 37)..."

"Exercise and enjoyment are sufficient motives for many persons to walk. But this is seldom true for the untrained blind person (p. 39)..."

"... other factors which must be kept in mind in connection with this loss of mobility: its relationship to career, to recreation, to social adequacy, for example (p. 40)..."

"The loss of mobility is perhaps the greatest of all the reality losses of blindness; it intensifies what might be considered the other greatest loss, that of social adequacy, both in its reality and its emotional aspects. Restoring mobility to the extent needed for a normal life and work is necessarily one of the major objectives of a rehabilitation program, and modern developments have at last made it possible to achieve this objective..."

"... the need for professional training must be emphasized, for the

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TO: THE DIRECTOR, NATIONAL BUREAU OF STANDARDS
WASHINGTON, D. C. 20535
FROM: DR. J. H. GOLDSTEIN
RE: 100% C₁₃ GLUCOSE
100% C₁₃ GLUCOSE
100% C₁₃ GLUCOSE

Enclosed for the Bureau are two boxes of 100% C₁₃ glucose. The first box contains 100% C₁₃ glucose in the form of a solid, and the second box contains 100% C₁₃ glucose in the form of a liquid. The solid is a white, crystalline material, and the liquid is a colorless, odorless liquid. Both are of high purity and are suitable for use as standards in mass spectrometry.

The solid 100% C₁₃ glucose was prepared by the reaction of 100% C₁₃ glucose with a suitable reagent, and the liquid 100% C₁₃ glucose was prepared by the reaction of 100% C₁₃ glucose with a suitable reagent. Both are of high purity and are suitable for use as standards in mass spectrometry. The solid is a white, crystalline material, and the liquid is a colorless, odorless liquid. Both are of high purity and are suitable for use as standards in mass spectrometry.

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mobility therapist takes the life and safety of his trainees into his hands (p. 134)...

"... it is not surprising to find many partially trained or even wholly untrained persons volunteering to show blind people how to get about. But to give a blind person confidence without proper and thorough training is worse than nothing. We can hope for the day when some form of license to give mobility training will be required (pp. 134- 135)...

"... not every mobility course offered by an agency for the blind is taught by a trained mobility therapist--on the contrary, too many are taught by completely untrained or partially trained amateurs (p. 135)...

"To understand the complexity of the problem of restoring lost mobility, it may be helpful to review what a person needs to perceive in order to walk with ease. He must perceive his present position (and perceive this anew with each step he takes). He must perceive his destination--not necessarily the final destination, but at least something of the direction in which it lies, also a destination which lies within his reach, and the immediate goal to be reached by his next step.

"He must also perceive the obstacles along the route: those underfoot which he might fall over or trip on; trees, houses, parked trucks, baby carriages which he must bypass; protruding corners or branches which might injure him; and things falling or threatening from overhead.

"He must perceive the path itself and all the changes in its horizontal and vertical plane--steps down or up, drop-offs, open man-holes, slight or major turns to the right or left, sudden or gradual changes in grade, and whether the footing ahead is secure, rough, slippery.

"He must also be aware of the possible or imminent mobile obstacles which may be approaching some point ahead on his route. And he needs to perceive something of the general environment in which he is traveling.

"The problem of restoring mobility is, therefore, primarily that of training the blinded person to use his remaining senses and the travel tools which extend the reach of his senses to perceive all these things (pp. 135- 136)...

"The proper use of this cane must be taught by a therapist especially trained in the Hoover cane technique; the cane is almost worse than useless without proper instruction. But with it, the average blind person can learn to move with independence, ease, and even grace (p. 140)...

"Basic to any consideration of organized work with the blind is the question of the fundamental viewpoint or 'philosophy of blindness' animating and directing both work and workers. If blindness is such an overwhelming handicap that nothing can be done except to ease the lot of blind persons, then segregation for education, for work, for recreation, for housing is the only possible answer. But if blindness, though indeed a major and multiple handicap, is one that can be overcome to a degree that makes normal life and work possible for the majority of blind persons, then our effort should be toward their integration into sighted society...

"... we often hear that only the blind can truly understand the blind. 'Sighted people can never give them true understanding. Let them

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be together, as they really want to be. Some few sighted persons can understand the handicap, and these should be the workers at the segregated centers for the blind. Then, from their fellow blind and from these few understanding workers, the blind will find something of happiness, and also gain some training' (p. 328)...

"In the same way with mobility--one blind man might hand on to another a few tips about using the orthopedic cane, but otherwise blind and blinded persons have been left to their own devices to find out how to walk or grope or fumble along--or be guided. The guide dog was a great step toward rehabilitation and independence here--and at last mobility therapy and the professional training of mobility therapists are under way. But here again, many institutions and agencies still do not recognize the vital importance of mobility training, nor the necessity for training the blind person's senses on the one hand and training the therapist on the other (p. 341)...

"... the realization is beginning to grow that on the one hand, blindness is a multiple handicap, requiring many-phased restoration, and that on the other hand, each blind person is an individual with his own particular needs who must be helped as an individual (p. 342)...

"But the best yardstick of our progress toward the restoration of blind persons on the one hand and of society on the other is, in the final analysis, not so much the number of people served as the number who have been served so well that they no longer need the services of the agency. Our final purpose is to help as many blind persons as possible to achieve such an adjustment to their blindness that they are free from dependence on us and from abnormal dependence on anyone (p. 345)."

--Carroll, T. J. (1961). Blindness: What it is, what it does, and how to live with it. Boston: Little, Brown, & Co.

"Content of Graduate Level Programs for Professional Training of Orientation and Mobility Teachers

SETTING

Programs to train teachers of orientation and mobility are on the graduate level and are administered by departments, schools, or colleges of education.

SELECTION OF CANDIDATES

Students are selected from candidates who meet the physical and personal qualifications outlined in Standards 1.4 and 1.5.

Academic prerequisites are an undergraduate degree in behavioral or biological sciences. At the discretion of the program director, students from other areas of specialization may be accepted when the students' records and college curricula suggest that prerequisites are made up.

CURRICULUM CONTENT

The curriculum includes the following:

1. Course work and experiences which identify and describe sensory deficiencies.
2. A study of complications which may develop out of visual and

1. The first part of the paper discusses the importance of the study of the history of the United States.

2. The second part of the paper discusses the importance of the study of the history of the United States.

3. The third part of the paper discusses the importance of the study of the history of the United States.

4. The fourth part of the paper discusses the importance of the study of the history of the United States.

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- accompanying sensory impairments.
3. Course work and clinical experiences which help students to learn about the emotional climate which surrounds the blind or visually impaired individual.
 4. A study of the etiology, incidence, care and treatment of visual impairments and blindness.
 5. A historical review of the care, treatment, education and rehabilitation of those who are blind or visually impaired.
 6. A study of the special programs and services which have evolved for the benefit of people who are affected by complications arising out of visual impairments and accompanying impairments, if any.
 7. Information about various administrative frameworks and agency settings of the aforementioned special programs and an understanding of how those who teach orientation and mobility fit into and contribute toward the larger objectives of these programs.
 8. Information regarding such specialized agency functions as public relations, fund raising, etc.
 9. Course work and experiences which reveal the dynamics and objectives of education, rehabilitation, and other services of special benefit to those who are blind or visually handicapped.
 10. A study of the special state and federal laws and regulations relating to the blind and visually impaired.
 11. A historical review of orientation and mobility, including a study of the role of human guides, dog guides, canes and all other related prostheses and sensory aids; also consideration of pertinent current research.
 12. Use of low vision aids as they relate to orientation and mobility.
 13. Correlation of theoretical work with a continuous program of practicum, clinical training, internship or residency (pp. 645-646)."

--Commission on Standards and Accreditation of Service for the Blind. (1966). The COMSTAC Report. In Welsh, R. L., & Blasch, B. B. Eds., 1980). Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 645- 646.

"Transportation and scheduling are two very formidable problems in the non-residential rehabilitation center program. To get clients to and from the center on a daily basis, the easiest solution is for the agency to provide door-to-door transportation. However, with rising transportation costs, this may not be a viable solution..."

"... Family members, neighbors, and/or friends may be needed to see that the student travels to and from the center safely. While this approach is in opposition to most principles of sequential teaching, it has one distinct advantage; the client realizes from the first day of the rehabilitation program that independent travel skills are necessary, desired, and expected. Another advantage of nonresidential rehabilitation centers is that mobility instruction may take place in areas where the client actually resides..."

"An important advantage of mobility services in a center-based program whether delivered on a residential or non-residential basis is that specific written unit outlines and lesson plans can be developed and used (p. 551)..."

"Community-based or itinerant mobility instruction involves a

2. The second part of the document focuses on the implementation of the proposed changes. It details the steps involved in the transition process, from the initial planning stage to the final execution. This section also addresses the potential challenges that may arise during the implementation phase and provides strategies to overcome them.

3. The third part of the document discusses the impact of the proposed changes on the organization's overall performance. It highlights the expected benefits, such as increased efficiency and cost savings, and provides a detailed analysis of the potential risks. This section also includes a comparison of the current state of the organization with the proposed changes, illustrating the expected improvements.

4. The fourth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of the proposed changes and the need for continued monitoring and evaluation. This section also includes a list of recommendations for future research and development, ensuring that the organization remains at the forefront of its field.

5. The fifth part of the document is a conclusion that summarizes the main points of the document. It reiterates the importance of the proposed changes and the need for continued monitoring and evaluation. This section also includes a list of recommendations for future research and development, ensuring that the organization remains at the forefront of its field.

different set of planning guides to establish services. Itinerant mobility instruction cannot operate on the same basis as center-based or residential-school programs. Whereas center-based instruction uses written lesson plans given in familiar environments, the locale of itinerant instruction changes with each student. Because training areas are always changing, the mobility specialist will not have time to develop written daily lesson plans for each student in each environment. The instructor will need to use more general teaching outlines or unit guides. The unit guides must be developed so that they are competency based in delivering one-to-one instruction to the client. Efforts must be centered on delivering a cohesive pattern of lessons to the client and the instructor must be flexible in the design of daily lesson plans to achieve teaching objectives. There must be concentration on the development of a success pattern in skill acquisition rather than whether one lesson or another has been completed. The most difficult aspect of itinerant mobility instruction is the establishment of a well-organized, cohesive sequence of lessons designed to lead clients from one skill level to another on a graduated performance basis...

"The advantage of itinerant mobility programs is that adults or children can be served in a wider geographic area by taking the service to where they are, eliminating the need for, and cost of, transportation to centralized locations. A major disadvantage is that instructors usually serve fewer students or clients resulting in higher program costs-per-person served. Frequency of visits in designing student schedules can also be a problem in an itinerant program. In the early stages of intensive instruction in cane use, it is advisable to schedule a minimum of three lessons each week to enhance skill acquisition and retention of principles of orientation. Students receiving instruction less than three days-per-week tend to make slower progress and require more frequent review. In later stages of training when students have firmly established certain successful levels of performance more infrequent scheduling may be planned (p. 551-552).

"Mobility programs for low vision clients should recognize that many of them may not need to learn the traditional orientation and mobility techniques in order to achieve independent travel. A client may function as a low vision person during the day and a totally blind person at night. They may or may not need to use a cane for independent travel. Evaluation of the efficiency of remaining vision of each client is the key to delivery of effective mobility services to low vision persons (p. 556)...

"The elderly, more than other visually impaired persons, generally have very definite ideas as to what they need and do not need. The mobility instructor must first have a good understanding of the aging process obtained both from the literature and, to a certain degree, from the person himself. The initial assessment should take into account any allied or related medical or general health problems. The instructor should be particularly alert to problems having to do with auditory, circulatory, or respiratory diseases. Lessons may have to be short to accomodate health problems or lack of stamina (p. 556- 557)...

"The majority of mobility instruction is given on a one-to-one client-instructor ratio for specific reasons. The one-to-one ratio gives the individual client or student maximum protection during the learning process, particularly in uncontrolled settings such as street and

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INSTITUTE
11, BEDFORD SQUARE, LONDON, W.C.1

stoplight crossings, business travel, and use of public transportation. It is unsafe and inefficient for mobility specialists to attempt to work with more than one client at a time. Group orientation and mobility instruction should only be given in an inactive classroom setting.

"The National Accreditation Council Self-Study and Evaluation Guide (1977) recommends that mobility specialists be scheduled for not more than six hours of teaching each day. Administrators should adhere to this guideline so that the mobility specialist has adequate time for record keeping and preparation of instructional guidelines and lesson plans (p. 557).

"Selection of students for mobility instruction should be a process of 'screening in' applicants as opposed to one of 'screening out' applicants. Ideally, as many people as are interested in achieving some level of independent travel should be accepted for instruction. Many times the criteria for selection is whether a person can complete a full course of mobility training. The program should, in fact, be designed to assist each blind person interested in mobility to achieve his highest level of independent travel regardless of physical, mental, or other limitations...

"Because administrators and mobility specialists are often faced with long lists of people waiting for mobility services, the selection of recipients is not easy. The process should be a joint endeavor among staff members, and take into account the client's need for the service as related to his overall program objectives...

"The evaluation process for prospective clients should include the compilation of general and special medical reports, an audiometric report, a concise sociological history, a statement of why the service is needed, and the mobility level desired (p. 558).

"A well-designed mobility program should include:

1. Clearly delineated communication guidelines among administration, mobility specialist, and other staff
2. Assessment and provision of insurance coverage for the institution, staff, and clients
3. Accountability and reporting procedures
4. Public relations and public education activities

"Four parties should be insured: the client; the mobility instructor; the general public, or in insurance terms, the third party; and the agency or school itself.

"General liability coverage will, in most cases, provide sufficiently for coverage of everyone involved in mobility instruction (p. 559- 560)...

"The high cost of delivering orientation and mobility services of good quality and in sufficient quantity cannot be argued as most of the instruction is on a one-to-one basis. Yet, in the long run, the cost benefits of orientation and mobility instruction are more highly cost-effective than almost any service we provide to visually impaired children or adults. In educational or rehabilitation programs, direct and indirect costs are most commonly determined on an annual basis, but mobility instruction is usually given in a time period much less than a calendar year. This is particularly true in adult rehabilitation programs... When compared to hours of instruction in other subjects, hours of mobility instruction are relatively few. The true cost-benefit

from orientation and mobility instruction lies not only in direct dollar costs for the service itself, but also in benefit derived by the recipient and the positive impact on his family and productivity. Effective and independent orientation and mobility is a directly usable skill in the daily life of a visually impaired person. Good mobility skills may help the blind person to attain a higher level of education, and to obtain and retain employment. More important they impart a sense of accomplishment and independence that few other personal adjustment skills can. Another benefit is that the increased occurrence of blind persons functioning independently creates a positive attitude toward them in the community.

"... Delivery of mobility services in a concentrated residential setting is more economical than the less efficient community based or itinerant mobility program. Yet, community and itinerant programs are effective in reaching a wide range of blind persons and are usually capable of meeting specific needs of individuals in orientation and mobility. A residential mobility program achieves most efficient use of personnel, and scheduling of clients and facilities. A residential-setting mobility specialist usually schedules six hours of lessons with an additional hour for program planning and record keeping. Itinerant programs cannot, in most cases, achieve this efficient use of mobility personnel because time must be allotted for travel between clients.

"... Most experts agree that mobility instruction for adults should be given in a concentrated period of time, and if possible on a daily basis. The ideal is considered to be one lesson per day, five days per week until completion of the program. Some adults can handle up to two hours of instruction per day, with perhaps an hour in the morning and another in the afternoon. In the beginning, there should not be less than three lessons in any week to prevent loss in the acquisition of skills (pp. 560- 561).

"High quality effective orientation and mobility services should be the goal of every school and agency. Effective mobility programs are well planned in every respect, from instructional guidelines to evaluation and follow-up of its clients. Administrators are responsible for employing qualified mobility specialists and giving them clearly defined job functions and duties. Few programs can be fully effective without responsive and appropriate supervision or effective inter-staff communications (p. 563)."

--Crouse, R. J. (1980). Administrative Aspects. In Welsh, R. L., & Blasch, B. B. (Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 549- 563.

"Blindness is not just a nuisance like being left-handed in a right-handed world. It is not just an inconvenience like living in a suburb without the ability to drive. What blindness is --and I include a severe visual impairment in this definition as well-- is a serious psychological, physiological, and cognitive blow to the individual which, left untended, impedes and can even destroy any chance for a normal and productive life...

"... if blindness is a severe blow which creates unique needs, then we must insist there be people trained to meet these unique and specific needs. We need these specially trained people in four areas: education of the visually handicapped; rehabilitation teaching; orientation and

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

which are subject to the boundary conditions

where $\mathbf{A}$ and $\mathbf{B}$ are $n \times n$ matrices, $\mathbf{C}$ and $\mathbf{D}$ are $n \times 1$ matrices, and $\mathbf{F}$ is a $n \times 1$ matrix.

The second part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

where $\mathbf{A}$ and $\mathbf{B}$ are $n \times n$ matrices, $\mathbf{C}$ and $\mathbf{D}$ are $n \times 1$ matrices, and $\mathbf{F}$ is a $n \times 1$ matrix.

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where $\mathbf{A}$ and $\mathbf{B}$ are $n \times n$ matrices, $\mathbf{C}$ and $\mathbf{D}$ are $n \times 1$ matrices, and $\mathbf{F}$ is a $n \times 1$ matrix.

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mobility instruction; and employment placement (p. 227)...

"All the library staff found, all the professor found, were arguments based on assumptions and faith, a few highly flawed research studies with samples too small from which to generalize. No longitudinal studies. No powerful testaments from blind and visually impaired persons describing in concrete detail how professional services made a positive difference in their lives. No vivid word pictures by professionals that shed telling light on what they do and how it helps blind persons gain skills that lead to integration into the community, a good and rewarding job, a fulfilling social life, the ability to maintain their own homes, or, if they are multiply handicapped, to live successfully in a group home...

"I have never bought the idea that if you are trained to manage, it doesn't matter what you are managing. I want administrators of services to blind persons to have managerial skills but I want them committed to blindness first...

"The commitment to blindness the professional ... brings to service leadership affects the entire system...

"Because committed administrators understand what the professionals they employ do, they can argue effectively for trained and certified staff. And they in turn have the knowledge to be a genuine support to that staff...

"Do we call them professionals, expect them to act thus and yet treat and pay them like technicians? (p. 228)...

"Recently, watching the Winter Olympics night after night, we in the United States were treated to or had inflicted upon us, depending upon your point of view, endless discussions of why some countries won more medals than others. The answers were always the same: a commitment to excellence; strong and knowledgeable national and corporate support; adequate financing and appropriate training facilities; dedicated, well-trained coaches who knew the participant's unique strengths and weaknesses; contestants with well-thought-out goals and enough self-awareness and confidence to seek out and accept the help they needed.

"I can't think of a better recipe for the blindness system (p. 229)."
--Gallagher, W. F. (1988). Categorical services in the age of integration: Paradox or contradiction? Journal of Visual Impairment and Blindness, 82, 226- 229.

"Independent travelers become competent because their living arrangements require them to get around the community. The necessity of becoming a good traveler and the opportunity to develop good travel skills usually do not arise until a person lives away from home.

"Therefore, blind and visually impaired high school graduates often do not have extensive experience in orientation and mobility and thus lack knowledge that is basic to the development of advanced skills in this area.

"For the most part, these skills are rooted in the development of early concepts and body movement--skills that are vital to all persons and are learned incidentally by sighted children through visual observations.

"Delayed motor development has long been recognized as a significant problem for many blind and visually impaired infants, who must be carefully taught to sit, crawl, and walk. The performance of these milestones in motor development is dependent on the ability to reach for

4. The fourth part of the document addresses the issue of internal controls. It explains how a well-designed system of internal controls can help to minimize the risk of error and to ensure that the organization's assets are protected.

6. The sixth part of the document discusses the role of the government in regulating the financial system. It describes the various laws and regulations that govern the behavior of financial institutions and the consequences of non-compliance.

8. The eighth part of the document discusses the role of the media in financial reporting. It describes how the media can help to disseminate financial information and to hold financial institutions accountable for their actions.

visual cues and to be interested enough in them to move. Good posture, gait, and control of one's body as one moves are developed through visual modeling and feedback.

"In contrast to sighted children, blind and visually impaired children may need a great deal of instruction in body image, body planes, laterality, and directionality. Again, the significance of visual feedback in knowing where one's body is in space or in relation to other people or objects cannot be overestimated.

"Basic concepts of position are rarely taught to sighted children. Most preschoolers assimilate the meaning of conceptual terms by repeated observations of the position of objects whose relationships are described in casual conversations: 'Your spoon is next to the plate,' 'see the balloon go up in the sky,' and 'take four giant steps backward,' are some examples. For blind and visually impaired children who cannot observe the gestalt of any situation, determining the meaning of concepts presented in casual situations is difficult. Hence, they require repeated experiences, presented in well-considered, planned opportunities for learning specific concepts, to understand positional relationships.

"The detection and recognition of auditory and olfactory cues in the environment are other skills that all children are expected to learn experientially. However, blind and visually impaired children must deal with these cues without being able to organize them visually. Therefore, they must be taught the significance of these sensory cues and how to use the cues in orienting themselves to their environment.

"The acquisition of advanced orientation and mobility skills depends on the development of body image, spatial orientation, positional relationships, and sensory awareness. The mastery of these prerequisite skills requires instruction by a thoroughly prepared orientation and mobility specialist (p. 12)..."

--Hatlen, P. H., & Curry, S. A. (1987). In support of specialized programs for blind and visually impaired children: The impact of vision loss on learning. Journal of Visual Impairment and Blindness, 81, 7- 13.

"... In addition to these preliminary methods of mobility, involved and detailed training is provided in the effective use of the white cane. This cane is specially cut to fit the user, and is longer than the traditional walking cane. It is also marked with red and white reflective tape that is easily recognized by motorists or pedestrians. The white cane, when properly used, can become an indispensable tool for discovering valuable information about the environment, and for providing protection from obstacles that may be encountered. Techniques for cane travel indoors, in quiet residential neighborhoods, small business areas, rural areas, shopping centers, and large commercial areas are taught, with each area requiring specific and detailed lessons. Lessons may also include use of public transportation systems, such as city and intercity buses, taxis, trains, subways, and airports. Efficient cane travel involves a great deal of instruction, often requiring more than 200 hours of training..."

--Hickman, B. B. (undated). "Orientation and mobility: What is it?" Multimedia (slide/tape) document. Atlanta, Georgia: Mobility Services, Inc.

"One of the most sought-after workers for the blind is 'the mobility instructor,' a highly trained professional whose importance is substantiated by a current shortage. There is no question that his competence and the philosophy which he represents are two of the most useful and hopeful resources brought to the service of blind people in our time. Again, it is certain that he is the direct product of programs which could not have begun or survived had not prominent ophthalmologists testified in the councils of government to the value of these experimental programs. Mobility instructors now graduating from Boston College and Western Michigan University were trained by instructors and resources developed at the Veterans Hospital in Hines, Illinois. The program itself went into operation against the advice of almost all officials, but upon the insistence of Dr. James N. Greear, then chief consultant in ophthalmology at the Veterans Administration Department of Medicine and Surgery. In both concept and personnel it was the outgrowth of the United States Army Program at Valley Forge, Dibble, and Avon, which had been founded through the courageous insistence of Dr. Derrick T. Vail. As chief consultant in ophthalmology in the European Theater of Operations, Vail returned to the United States in 1944 to force through a dynamic, experimental program for blind soldiers, sailors, and veterans (pp. 39-40).

"... As Gowman and Greear have shown the chief remedy was the sighted G.I. who 'taught' the blinded person how to be blind. The agencies, who had originally been cool toward the War Blind Group, were now horrified. By 1946 the idea of the blind leader of the blind, which was so brilliantly exploited in the last century by Sir Francis Campbell, had become so nearly sacred that in adult programs at least it was almost a fundamental principle that all instructors of the blind be blind themselves. As alienation from formal work for the blind increased, so did the opportunity for experimentation. It was in such environments, unencumbered by old rituals, that new patterns began to develop. In fairness, it must be said that the army had in large numbers one element which the agencies had always lacked: personnel. However, it is also true that army personnel were willing to encourage the independence of blind people with true zeal for freeing them from custodial care. They saw plainly that this involved everyday practicalities (p. 40).

"For those who are deprived of the visual ability to maintain control of physical position and movement from place to place, the loss of orientation and mobility is probably the greatest. Historically, the stick, staff, or cane has been the most common tool to help overcome this loss...

"... developments in a hospital setting during World War II were directly responsible for the advances since 1960 in the graduate training of mobility and orientation instructors... to propagate techniques and aids in travel. These new ideas and training methods at first met great resistance but have now been proven to be one of the greatest contributions to new rehabilitation programming.

"... the human guide has an important role in the orientation and mobility life of the blind, whether he is the physician in the office, the nurse or aide in the hospital, the parent or kin in the home, or the friend or stranger on the street and in the bus, plane, or cab. Yet few people know the principles and philosophy of guiding, directing, or moving with the blind (p. 51)...

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FROM THE FIRST SETTLEMENT
TO THE PRESENT TIME
BY
JOSEPH NEALE
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VOL. I.
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"A uniform method of protection was adopted to eliminate the natural inadequate attempts at groping to which so many people without sight resort. Either the right or the left arm can be used: the upper arm is held at right angles to the shoulder and parallel to the floor, while the forearm is held parallel to the floor at right angles to the upper arm with fingers extended and relaxed to protect the far side of the body. For even the most awkward this method gives adequate protection against door jams, posts, and half-opened doors which might damage the face or eyes (p. 52).

"If the patient is to be guided, the proper procedure is for the guide to ask the patient to take his arm. If it is necessary to make some slight movement to get out of the way or maneuver into position, to sit down or get up, he must direct the patient in doing it. This is not done by shoving or by propelling. One does not take his hand and move it from him unless it is necessary to show him some particular object, at which time the action is prefaced by saying 'Let me show you' (pp. 52- 53).

"In directing a patient who is blind to do something... one should be particularly careful to picture carefully what move the patient is about to make in order that exact directions may be given. Special care should be taken to avoid mixing right and left. This is frequently done when one is facing a person and can cause much confusion. If a patient has been guided to a place and left alone, one should be sure that he understands his location. It is usually better, under such circumstances, to establish some point of contact, such as a counter, chair, table, or wall.

"Rarely is anything done well in confusion, particularly in the case of people without sight. This should be kept in mind and pains should be taken at all times to avoid mix-ups, indecision, and upheavals in plans.

"The patient or client is as capable of observing the rules of courteous behavior as he always has been, even though he cannot see. He will expect to shake hands on being introduced but since he will not see an offered hand, it must be presented to him in a way which is comfortable and convenient for him to locate. It should always be made clear when one is leaving a person who cannot see; one should never leave the person talking when he is not there; and he should always tell the patient when he comes back.

"The expressions 'over here,' and 'right there' should be used sparingly. Instead, one uses 'Let me show you,' to fill up the time lag until one can establish contact between the patient and the object or chair to which he is directed (p. 53).

"One must be careful in offering examples of what other blind people can do. An individual must learn about this in a natural way from general conversation. One never knows to what level an individual may rise; therefore, it is unwise to underline the achievements of others in such a way that he feels inferior (pp. 53- 54).

"Articles should not disappear from a patient's reach as if by magic. If it is necessary to move his personal belongings, or some object which he uses regularly, he must be told it is being moved and where.

"If entering a confined space such as a small examining cubicle, an examining chair, or an automobile, a person can engineer his own actions better if one hand is placed on something like the door handle or some

other familiar object and the other in an area where he might accidentally bump his head. Then the situation will be familiar enough to suggest the whole picture to him. If he becomes confused, further information can be given, but no more than one person should take over in such cases. In public places or in noisy places where there is confusion, a person will need much more help than in quiet, familiar surroundings. Many of the things he ordinarily does with ease in his own environment will become difficult in a different place (p. 54).

"The proper cane used correctly can be the most valuable aid yet available to the majority of the 'blind.' One must remember it is only an aid, and that to travel competently from place to place, the blind cane user must not only be familiar with the cane touch technique but must be able to listen and use what he hears. Most blind travelers say that hearing is the most valuable orientation sense. Underdevelopment or lack of such clues either from ignorance, pathology, or unawareness prevents top-quality orientation to one's surroundings. The tactile sense transmitted primarily through the fingers, hands, and feet and through the cane to the fingers and hand is also a valuable orientation and travel tool. It must also be isolated, developed, and taught. It is obvious the olfactory sense can also be useful. Many establishments such as bakeries, markets, barber shops, flower stands, and candy and peanut shops can give valuable orientation clues to the blind travelers. Proper training techniques can also improve the use of this sense (pp. 57- 58).

"Even if all senses are exceedingly acute and superbly trained, the blind traveler still needs to know first whether there is a safe platform on which to step and whether there are objects in the path which would lead to injury or embarrassment if undetected and unnegotiated. This is just what the correct cane properly used can tell him (p. 58).

"In trying to teach techniques in the use of the cane as a travel aid to hundreds of newly blinded it was soon discovered that the customary white cane was inadequate. Similarly, individual systems developed by some blind travelers could not be universally adopted. An attack on these two problems was made by the author and his staff. The design and characteristics of the perfect cane were analyzed. First of all, it should be just long enough to inform the user of a safe spot on which to place his next step, a length that will differ with each traveler. It must be light in weight so as not to cause fatigue. There should be a grip, crook, or handle which allows ease of handling and perfect control without finger cramps, palm sweating, or annoyance from extreme temperatures. There should be a durable tip which does not wear too rapidly or stick too badly when being touched to terrain, but which dampens none of the desirable tactile and audible information it should be reporting. The shaft itself should be durable and properly conductive --transmitting tactile and audible clues but avoiding undesirable or dangerous conductions such as electricity, cold, heat, and unnecessary noise. It would be convenient if it were telescopic or easily collapsible to allow for easy storage when not in use --as in trains, buses, planes, restaurants, and china shops. If possible it should be attractive. The color is individual and not necessarily white. The white cane, such a popular image of the blind in this country, was adopted as a national promotional project by the International Lions Club Convention in Toronto in 1931. As a result local ordinances and state laws have been passed

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

TO THE HONORABLE SENATE
OF THE UNIVERSITY OF CHICAGO

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN CHEMISTRY

BY
JAMES H. HARRIS

THESIS SUBMITTED TO THE FACULTY
OF THE DIVISION OF THE PHYSICAL SCIENCES
IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
DEPARTMENT OF CHEMISTRY
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concerning their use and significance. But blind persons who wish instead to use canes of other hues are at liberty to do so, and their own skill and judgment in managing the cane can be much more dependable than the dubious advantage of being spotted by a motorist on modern highway. The cane is currently regarded as a symbol of independence and not one of dependence. Its value now lies in its proper use and not in its specific color.

"The problem of finding a technique that made the best use of a good cane remained. The user needed to determine the presence of a safe platform on which to step, to avoid all dangerous and embarrassing objects from the waist down, and to determine steps down and steps up. The cane makes no claims to find objects hanging from above, to maintain balance and direction, to plan directions, or to otherwise fulfill the requirements of muscle, nerve, hearing, smell, or touch other than that immediately conveyed as the cane touches the terrain with each step taken. It can be used as a bumper in certain areas and under certain conditions and there are designated techniques for this specialized use. Its real value is in negotiating ever-changing and unfamiliar environments (p. 59).

"When the cane is used in an uncontrolled environment the hand gripping the cane is dropped in a natural position to the side. The dorsal aspect of the elbow is then rotated inward slightly so that it rests firmly on the hip bone, and the hand holding the cane moves to a comfortable, moderately relaxed position in the very center of the body slightly below waist level and very close. The cane is held at the proximal end with the weight supported comfortably against the thenar eminence and guided largely by the thumb and index finger. With the forearm remaining stationary the hand moves back and forth pointing the cane so that the tip describes an arc before the user. This arc should never rise more than one or two inches above the ground and should always touch the spot where the advancing or rear foot is about to be placed, thus ensuring that there is no obstruction but solid safety for the advancing foot (pp. 59- 60).

"If a traffic intersection is to be negotiated the orientation and techniques are very specific and involved and will not be detailed here. However, since ascending or descending steps is often a hair-raising experience even for the normally sighted, the somewhat condensed description of technique is included to show the logic and safety involved (p. 60).

"When the tip of the cane indicates the presence of a drop or a step down, the first thing which must be ascertained is the depth of a step. This should be done by putting the cane down on the second step and moving forward until both toes extend over the edge of the step the same distance when the heels are parallel. In this way good direction is obtained. If there is a succession of steps, the next important thing is the width of the tread, which is found by moving the tip of the cane forward until the edge of the second step is located. Then, it is important to know if there is a margin of safety on either side in order that one may not step off the side in case there is no wall or banister. This is done in one sweeping motion of the tip of the cane along the edge of the second step from about twelve inches past the left side of the body to approximately twelve inches past the right side of the body. Now the traveler is ready to descend, with the hand holding the cane falling naturally at the side

and the tip of the cane extending past the edge of the second step and two or three inches in front of it. The cane and hand are held motionless, the traveler tilts the head forward as if looking where he is going, for this gives better balance, and descends with a relaxed, normal gait. If the cane and hand have not been moved during the descent, the tip of the cane will touch when the bottom of the steps has been reached. The foot/cane rhythm is then resumed (pp. 60- 61).

"This does not complete in detail all the intricacies of cane use, but it is specific enough to familiarize the physician with the mechanics and notion of the cane's design, characteristics, and effectiveness.

"So important has the concept of orientation and mobility become that in 1960 the Vocational Rehabilitation Administration of the Department of Health, Education, and Welfare sponsored the first school of peripatology to be founded --in the School of Special Education at Boston College. This educational program and training leads to a master's degree in special education. Since then, departments have also been established at Western Michigan University and California State College at Los Angeles. Others are in prospect and interest in undergraduate training in this specialty is also beginning to prosper. This means that qualified instructors with master's degrees will soon be available in agencies, schools, centers, and hospitals to supervise, direct, and teach these important skills (p. 61)."

--Hoover, R. E. (1967). The ophthalmologist's role in new rehabilitation patterns. In Hoehne, C. W., Cull, J. G., & Hardy, R. E. (Eds., 1980). Ophthalmological Considerations in the Rehabilitation of the Blind, 39- 65.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1950

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF CHICAGO
FROM THE DEPARTMENT OF CHEMISTRY
SUBJECT: REPORT ON THE PROGRESS OF RESEARCH
DURING THE YEAR 1949

REPORTED BY
DR. ROBERT M. HARRIS
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF CHICAGO

"The skills required [by blind people] to walk with ease and confidence in a variety of environments are quite complex and involve detailed sensory information...

"Everyone agrees [blind persons] need an ability to travel on foot from place to place with comparable ease to what is experienced by a normally-sighted person...

"... mobility [can be] defined as 'walking in public places with a physical ease and mental confidence which allows one to blend naturally with one's fellow pedestrians'...

"I again wish to define mobility used here as encompassing those skills and knowledge which enable one to walk unobtrusively among one's fellow men. Deeply involved with this physical process is the means for orientation used in its conventional sense (p. 289)...

"It may of course be argued by some that mobility for the blind does not imply, or require, that the blind traveler blend naturally with his fellow pedestrians; merely an ability to get from place A to place B safely is all the skill that need be acquired. Some blind people are convinced that they already possess this skill through self-teaching without the use of aids, and do not accept the need for devices. They forget, however, that even the short cane is an aid. Unfortunately, they cannot see themselves while they hazardously and hesitatingly negotiate their environment; their stress is a measure of their courage, not their competence. The uneasiness they often create among the sighted helps to maintain in this majority group the age-old feeling of helpless sympathy. Sighted people who can support such arguments have not yet been exposed to the possibilities of blind travel which now exist. Few appreciate the long-term impact such travel can have on the relationship between the sighted and the blind which at present constitutes a significant handicap to greater employment possibilities...

"When we discuss mobility we are in fact giving some thought to probably the most complex skill man can acquire. Because we each develop an ability to be peripatetic through the natural use of our motor system and our numerous sensory inputs, we normally give little thought to how we move about. Certainly, the average person does not consider it to be a skill. But when deprived of vision through blindness or a blindfold, we all find that this skill has deteriorated to an almost non-existent level. Congenitally blind persons never do develop it very far of their own accord...

"It would be doing ourselves an injustice to suggest that mobility as we know it is a relatively simple process which is easily acquired; yet this is what is implied when some say that the blind traveller needs only a simple form of indicator (go/no go device) that the path ahead is clear. We all perform as very complex, 'intelligent,' biological systems, and the motive power output of the body is controlled through the feedback of sensory information it receives from the environment. The more complex the task, the more detailed the information the sensory system needs to receive. If the process were simple, mobile robots would have been built long ago (p. 290)...

"Our ready ability to perceive our environment through vision, hearing, and the sense of touch, disguises the information we need for peripatetic travel. Anyone driving a car who has become startlingly conscious of nearing a destination (even perhaps the wrong one), without

having realized that a section of the route had been passed, will appreciate that very little detail of the surrounding environment, as it was being passed, provided actual travel information. Certainly, full attention could not have been on the task at the time, and therefore the information was not being processed at a conscious level. We seek then to discover the minimum environmental information necessary for peripatetic mobility. To this end, it is suggested that there are three basic skills which have to be used in the variety of situations one is constantly encountering. These skills are essentially control functions of the body, involving input information about the environment and the goal from which errors in movement may be detected and used to modify the motor output. The skills may be ordered according to difficulty: a) Walk parallel to a guide line (railings, fence, shop fronts, etc.); b) Walk perpendicular to objects (approaching a specific thing or place); and c) Negotiate an obstruction (fixed or moving) in the path, i.e., change the direction of travel in a controlled manner so as to avoid the obstruction and re-establish the original course.

"The control system can only use information which provides it with the coordinates of the object space. While these may be interpreted as a 'picture' by the 'intelligence' of the system, they must ultimately involve distance, direction, and their derivatives, presented in some form which initially may not even be familiar. This seems to be basic to any form of controlled spatial movement. Just how our minds interpret the input information is not an issue here, but in order to use this information at all, in the real environment, we must possess an ability to discriminate between the 'wanted' and the 'un-wanted'.

"... A blind traveller using his ears, feet, and perhaps a short cane, puts up a poor performance compared with a sighted traveller. His ability to sense the surrounding environment is too limited and his 'intelligent' control system has inadequate input information for skillfully controlled motor output through the limbs (p. 292)...

"Properly used, the long cane will provide the blind person with information about the terrain where next each foot is about to be placed. Ideally, the cane just touches the ground on the spot where the foot is about to be placed and, using a sliding technique, the surface structure of the ground can be sensed through the vibrations set up in the shaft. A drop in the ground, due to a curb, etc., may be sensed by the slight angular downward change in the cane handle; ascending steps or an up curb produce an unmistakable abrupt change in cane movement. The device is not normally classed as an obstacle detector, but it operates as one, through making contact with an obstruction in the pathway. The user may suddenly have to change his momentum so as to avoid colliding with it.

"It has been observed that once a travel pattern has been established through extended use of certain routes, the blind person does not seem to continue using the cane in the well-defined technique learned during the lengthy training period. This may be due entirely to lazy adaptation by the human to a physically 'relaxed' technique. Even the most experienced travellers seem to regress in their use of the cane in this respect, and many have been seen to overstep curbs. It is evident, nevertheless, that they continue to gain much information which is not available through the sense of hearing or the feet.

"Without the use of auditory cues, however, the cane is virtually useless; with good and knowledgeable use of hearing, the cane adds significantly to man's ability to be mobile without vision (pp. 292- 293)

...
 "... the traveler must be able to discriminate between the boundaries and objects in the pathway. There are various ways in which this can be made possible, but all involve the establishment of an adequate percept --which must have a cognitive pattern-- and to which a prior sequence of events is essential. In fact, the latter may be the primary basis upon which a travel pattern is established, rather than detail perceived at any instant. In attempting to perceive his environment as comprising two boundaries and a number of objects which lie generally on (or outside) the boundaries, but which may occasionally appear spatially at random inside the boundaries, man is faced with a complex perceptual task. In terms of what we normally perceive visually, this task may seem to be very simple, but in terms of what we need to perceive through a new sensory aid, it is far from trivial. This is because the process of learning to perceive space through some new medium is very strange and new percepts can be learned only through a prolonged locomotive experience (p. 294)...

"It is a relatively easy matter to discuss the clear path thought to be required by the blind traveler, since in essence this is a trivial matter; but once we have to consider environmental sensing, we are faced with an ill-defined concept which has as its upper limit the vision enjoyed by the normally sighted person. Just what information does man need in order to perceive his environment adequately for peripatetic travel? Given the basic skills of mobility in the form of control functions, these have to be transferred to an 'infinite' variety of situations. While the needs of each individual may be limited through cognitive and socio-economic circumstances and become well defined over a period of time, there are, in general, a great variety of environments in which blind people wish to travel; the situations for which sensory aids must be suitable, therefore, seem limitless (p. 294- 295)...

"Just as those of us who are vocal are able to construct grammatically correct sentences of words spontaneously, those of use who are sighted are able to perceive a new environment at a glance, provided this fits the rules which we have come to accept. Objects commonly found in our surroundings have well established relationships with each other. An incorrect syntactic arrangement of spatial elements, such as 'the curb is on the left side of the path with the wall on the right and the roadway is beyond it,' is no different in principle from the ungrammatical sentence 'On cat the sat mat.' The syntactic relationships are simply unrealistic. It will no doubt be noted that this sentence, when correctly constructed, also represents part of the physical environment. A relationship between language and environment does in fact seem to be basic and is not merely trivial. When we try to construct an environment through means other than vision, we need to know the rules of construction in a way which did not seem necessary with vision (p. 295)."

--Kay, L. (1974). Orientation for blind persons: Clear path indicator or environmental sensor. New Outlook for the Blind, 68, 289- 296.

"It was generally agreed that one of the most valuable accomplishments of the preliminary adjustment program at Valley Forge was the 'long cane' foot travel system, developed by Sergeant (later Lieutenant) Richard E. Hoover, who was one of the soldiers brought to the

Valley Forge eye center when the Surgeon General's office spread a net through all Stateside Army service commands to locate men with experience in work for the blind.

"Before the war Hoover had been a teacher and physical training coach at the Maryland School for the Blind. He was convinced that the "white cane" customarily used by blind people was too short, too heavy, too cumbersome, and not a sufficiently good sound conductor to be really helpful as an aid to mobility. Moreover, it was employed in the wrong way and for the wrong purpose. The most serious problem of all was that no system existed for teaching blind people how to use a cane to maximum advantage. The assumption had always been that each person could learn for himself.

"A man of scientific bent (after the war he entered medical school and became a distinguished ophthalmologist), Hoover came up with the 'long cane.' It was made of metal with a plastic tip, was six to ten inches longer than the usual wooden cane, had a shaft of about half the thickness of the latter, and weighed only six or seven ounces.

"What came to be known as the Hoover cane was topped by a shepherd's crook that protected the hand. Designed for use as a bumper and a probe, the cane had to be employed in a definite technique, sweeping a low arc in front of the user in a rhythmic, cross-body pattern in which it lightly touched the ground in front of the foot that was about to be brought forward, insuring that this foot had an unobstructed spot on which to land. As it described the arc from one side to the other, the long cane struck any obstruction (a wall, the edge of a half-open door) directly in front of the blind man. It was long enough to keep the user from stooping while executing the arc or changing posture when going down or up a step. Its metallic body was a good sound conductor which provided important orientation clues to the presence of walls, open spaces or changes in terrain.

"Skill in the use of the cane was acquired only through careful teaching and rigorous practice. At Valley Forge Hoover trained a group of instructors in the systematic and orderly method by means of which they, in turn, could train the newly blinded men (p. 264).

"[Russell] Williams [of Hines Veteran's Administration Hospital] trained his staff 'as thoroughly as a coach trains a team for a big game' by emulating the methods developed at Valley Forge -- methods which became the core of teaching programs for rehabilitation therapists. Training [for the staff] took place under a blindfold, and encompassed both self-care functions and orientation and mobility skills. The blindfolded instructors (called 'orienters') were taught how to orient themselves in space by touch, smell, and hearing; how to travel erectly, rapidly, and safely with the use of the long cane; how and when to ask for sighted help. It wasn't easy. According to John D. Malazian, one of the first staff members at the Hines center and later its chief:

"There were numerous occasions during mobility lessons when they became disoriented and walked into the streets. One man walked into an open garage and was unable to get out without assistance... The men frequently were anxious and occasionally panicked when they were confused and lost but did not remove their blindfolds. Instead, they shouted for assistance... Each experience taught them better to appreciate and use their newly acquired skills and command of their remaining senses to select

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

2. The second part of the paper focuses on the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

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7. The seventh part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

8. The eighth part of the paper focuses on the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

9. The ninth part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

10. The tenth part of the paper focuses on the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

and interpret environmental clues.

"By the time the first patient arrived on July 6, 1948, all the orienters... had acquired enough experience to believe that the techniques were valid and would, if used properly, enable a blind person to travel safely, efficiently and independently in almost any type of environment.

"Flexible but firm in his judgments, Williams was capable of resisting the outside pressures that in any way threatened to impede the work of the center. And pressures there were. Some were trivial. Residents of the nearby community of Maywood who saw the trainees and their orienters practicing mobility techniques on the streets called to complain that the latter were heedlessly risking the safety of blind men. Now and again a citizen, sure that something sinister was afoot, would notify the police that a blind man was being followed by a mysterious stranger.

"Still a different set of problems arose when regional VA offices referred men who lacked the necessary emotional or physical strengths to benefit from such environmental therapy. 'Our program is tough,' Williams explained over and over. 'Its keynote is hard work.' Only men in sound health, able to undergo a regimen of physical reconditioning after years of inactivity, could be considered. Good physical tone was essential for successful training in independent travel. 'A blind man needs extremely strong feet and ankles if he is not to be thrown by the pebbles, sticks and unexpected depressions the ordinary person unconsciously sees and avoids. Even though the cane weighs only six ounces, its use requires a strong, flexible wrist and an untiring arm,' he told a reporter for the Chicago Herald-American in one of the few newspaper interviews he permitted (p. 278).

"By 1950, when about thirty units of one kind or another were in existence and calling themselves 'rehabilitation' or 'adjustment' centers, it became apparent that these terms meant different things in different places...

"... there were also important variations in program, emphasis, and execution... Mobility lessons of one sort or another were also given in all, but here the differences were even sharper. The [American Foundation for the Blind] report noted:

"The greatest variation in travel training lies in the use of the cane. All concede that the cane is the extension of the hand and is a tool with more uses than to show the sighted public that the blind have a visual disability. Two centers use the long metal cane but of varying lengths. Some insist upon the length of the cane being measured from the waist, others from the middle of the forearm, and again, others recommend no specific length but consider the comfort of the student. All centers use some variation of the Valley Forge training technique. Two of them follow it almost to the letter... Much needs to be done to develop more uniform techniques based on past experience (p. 295).

"Since the ability of a blind person to travel independently depended on more than the use of a mobility device, whether cane or dog guide, all... centers offered help in the development of the auditory, olfactory,

and kinesthetic senses. Here, too, they used different techniques... All the centers emphasized olfactory alertness in teaching outdoor travel orientation, calling attention to the environmental clues offered by distinctive odors emanating from bakeries, shoe repair shops, restaurants, or laundries (p. 295- 296).

"Makeshift techniques and trial-and-error methods were a feature of most programs, but this was to be expected in what was essentially a new form of service (p. 296).

"Once upon a time, there lived in a German village a blind old woman who was led to church every Sunday by a gander, which seized a fold of her skirt in its bill, conducted her to a pew, remained in the churchyard until it saw people leaving the service, made its way back to the pew, and brought its mistress back home again.

'It seems scarcely credible,' was the comment of the man who reported this possibly apocryphal tale in a 'treatise on the science of typology' published in London in 1872. What is more incredible is that the context in which this citation was offered contained a series of trenchant observations and recommendations it took the world the better part of a century to put into practice.

"The author was William Hanks Levy, an articulate and energetic blind man who was credited with a dynamic role in establishing home handicraft industries and workshops for the British blind. Just before he died, he summed up his life's experience in his 'treatise' titled Blindness and the Blind. It contained a chapter captioned 'On the Blind Walking Alone, and of Guides' in which Levy said:

"The importance to every blind man of acquiring the power of walking in the streets without a guide can scarcely be exaggerated. Loss of sight is in itself a great privation, and when to it is added the want of power of locomotion, the sufferer more nearly approaches the condition of a vegetable than that of a member of the human family (p. 301).

"In no aspect of work for the blind is there greater unanimity as to need-- or greater controversy as to method --than in mobility teaching. Loss of the power to move about freely and safely is unarguably the greatest deprivation inflicted by blindness. The problem was less acute in earlier centuries, when not only blind people but the great majority of others seldom ventured far from their native soil. Life patterns grew less static with the industrial revolution, as great sections of the population shifted from farm to town, from town to metropolis, from one part of the country to another, in search of economic betterment. The greatest acceleration of all has taken place in the twentieth century, thanks to the automobile and the airplane and the changed socio-economic climate which brought about a surge of social mobility. For blind people to be members of the larger society, freedom of movement has become a 'must'.

"It is no easy task. Mobility is keyed to a knowledge of the immediate environment, and vision, it is said, provides 80 percent (some authorities put the figure even higher) of the information needed for a person to move securely through space. The other senses also supply data, but vision is so dominant in its range and power that it assumes control of the total sensory apparatus.

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"That it is, in fact, possible to overcome the absence or loss of this integrative sense by means of efficient command and determined reorganization of the remaining senses is an idea so difficult for the sighted person to grasp that it has given rise to the mistaken theory of automatic 'sensory compensation' which figures so largely in the popular mystique of blindness (p. 303).

"... In 1946, Hector Chevigny, a writer who lost his vision in early middle age, provided a vivid description of what those [mobility] problems are:

"The newly blinded man taking his first steps is very much in the position of a child doing the same thing. His need for orientation is all but absolute. Like the child, the problem is one of ascertaining his exact relation to the physical world of stationary and moving objects... Taking his first steps, it seems as if the loss of sight has also taken from the man all but the power of touch as a means of relating himself to things. But touch is no good at distance; he has to find things to touch them and finding them seems impossible. On his hearing he places no dependence. In time he will learn to judge the size, shape, and even the contour of a room as soon as he enters it by the 'feel' and the sound within it, but right now he fails to note even the loud clank of a passing streetcar on one side of him and the ticking of a clock on the other. That smell, too, may become a factor in orientation doesn't occur to him either. For the moment there is only what he can encounter with his hands and --confound it!-- his shins (p. 304).

"Although the dog guide movement in and of itself has never served more than a small fraction of the blind population, it has nevertheless exerted a major influence by demonstrating the necessity for a formalized course of mobility training. This concept proved equally applicable to the cane travel technique initiated by Richard Hoover at Valley Forge and brought to advanced stages of development by Russell Williams and his staff at Hines (p. 314).

"The use by blind people of some form of cane or staff to guide their steps goes back to antiquity. A stout tree branch was probably the first such object; later, as man mastered the use of cutting tools, straighter and smoother staffs came into use. The traditional method was for the blind man to tap his way along, warning others out of his path and simultaneously setting up echoes which he used, consciously or unconsciously, as clues to the environment. The clatter of horse hooves or iron wheels was usually loud enough to prevent highway accidents. When, however, rubber-tired automotive vehicles took over the roads at ever higher speeds, the unaccompanied blind pedestrian faced increasing peril (pp. 314- 315).

"In 1930 the Lions Club of Peoria, Illinois, decided it could help out in this situation by having motorists share the responsibility for safe crossing by blind persons. At its urging the city of Peoria passed an ordinance making it mandatory for motorists to yield the right of way to persons who identified themselves as blind by carrying red-tipped white canes. The following year a statewide White Cane Law was enacted, and the

Lions proceeded to adopt the white cane movement as a national program, successfully pressing for passage of similar laws in all states. Some of these laws called for the cane to be held aloft or extended horizontally so as to be more readily observable.

"Added impetus was given to the white cane movement when Senator Schall, who had not yet acquired a second dog guide, was run over and killed by a car while crossing a Washington street just before Christmas of 1935. In the wake of this accident the [American] Foundation [for the Blind] issued a bulletin urging all agencies for the blind to support the white cane movement and offering to supply such canes at wholesale prices. The fact that white canes represented conspicuous labels of blindness was now considered of secondary importance.

"Twenty-five years later, in 1961, the Foundation issued a policy statement that more or less reversed its earlier position. Experience with the white cane had shown, the statement noted, that 'the great majority of motorists are unaware of the [its] meaning' and 'there is no confidence that the percentage of drivers who recognize the white cane as a "stop signal" will ever be very great.' Moreover, white cane laws were not being widely enforced, and those state laws that called for holding the cane aloft or extended at arm's length from the body not only made the cane dangerous to other pedestrians but precluded its more practical use as an obstacle detector. The white cane laws, the statement averred, simply deepened the public's belief that blind persons 'are unskilled in their ability to transport themselves, and, as a consequence, are socially or vocationally unacceptable.' The essential value of any cane was in its skilled use as a mobility tool; its color was unimportant (p. 315).

"One of the first efforts to share the lessons learned at Valley Forge with agencies serving the civilian blind was a training manual prepared for the 'orienters' at that Army hospital. As a service to its readers, the Outlook published the document in full in its issue of December 1947. It was a well-intentioned gesture, but it backfired. All over the country impulsive workers for the blind who read and clipped the article concluded that they now had all they needed to know to go and do likewise. The more thoughtful among them recognized that there was more to it...

"Other agencies, aware that the long cane method was being refined at the Hines VA center, applied for permission to send staff members there for a week or two of observation. A number of such requests were granted, but those agency heads who hoped that a brief visit would enable the observer to return fully equipped to introduce a mobility program were disappointed. Instead, a former member of the Hines staff was to recall, the visits 'served chiefly to whet the appetites for a much more thorough indoctrination and training.'

"... 'The war blind at the outset know nothing about being blind and as a rule know that they know nothing. They are willing to learn from seeing instructors because their self-esteem has not yet become involved with a concept of themselves as authorities on the subject.'

Dr. Knudson [director of physical medicine and rehabilitation for the VA] was alluding to the resistance, both silent and vocal, that traditionalists in work for the blind were showing toward the idea of sighted mobility instructors. For decades, whatever travel techniques blind people learned had come to them through home teachers, most of whom themselves were blind. What they taught was 'the way I get around,' a hit-or-miss proposition at best, satisfactory enough for indoor

orientation and mobility but hardly adequate for safe unescorted movement on unfamiliar city streets (p. 316).

"... Father Thomas J. Carroll and Kathern Gruber met in Chicago in November with Russell Williams and several members of his staff. What they worked out... was a set of guidelines outlining the overall responsibilities of a 'mobility technician' whose function was 'to be both teacher and coach in instilling into the blinded person knowledge of a science and skill in an art on which his personal safety and perhaps his life may depend (pp. 316- 317).'

"The work of the mobility technician, a memorandum summarizing the [1952 mobility conference attendees']... conclusions declared, extended beyond 'mere instruction in the proper use of a cane or of a guide dog.' These were simply tools. The technician's work was

with the sensorium of the blind person, making use of all the senses which remain when sight is gone;... with the intelligence of the blind person, giving knowledge of objectively evaluated methods of travel without sight;... with the will of the blind person, stimulating confidence in his ability to move without dependence (p. 317).

"Although orientation and mobility are customarily linked in a single phrase, they are separate functions. Orientation is the process by which a person locates his position in space and his relationships to surrounding objects. Mobility deals with actual locomotion from one position in space to another. Obviously, orientation is a prerequisite for mobility, but it is also an essential in itself, as when a blind person seated in a chair reaches out for the glass he knows is on a nearby table, or determines, by using his other senses, whether people have entered or left a room.

"Blind students were traditionally taught basic elements of orientation in the residential schools and, to some extent, in day school programs for the visually handicapped. They also discovered a good deal about their surroundings in the same trial-and-error way as all growing children.

"What they did not learn, until recent times, was how to navigate securely through unfamiliar environments. Richard Hoover, who had been a pre-war instructor at the Maryland School for the Blind, was concerned over the difficulties that confronted the older students, particularly those attending a community high school, in taking advantage of opportunities for growth-producing experiences 'downtown.' When, at war's end, he returned to live at the school for a time, he secured the consent of its superintendent, Francis M. Andrews, to introduce a few of the older pupils to the long-cane technique developed at Valley Forge.

"The lessons were a great success. Superintendent Andrews warned against efforts to teach travel without adequate preparation, but he was genuinely enthusiastic. 'Within reasonable limits, travel is safe; it is successful; it is an added means of independence for our blind (p. 320).'

"Once cane mobility instruction reached the master's degree level, a considerable demand arose among both residential and day schools for graduates of these programs. The United States Office of Education stepped in to assist in this process by granting funds for the formulation

of educational principles in teaching orientation and mobility skills to children... An important function of a certified orientation and mobility specialist... was to determine when each individual... was physically, mentally, and emotionally ready for cane travel (p. 321).

"A blind student once put the whole issue... succinctly when he said, 'I walk with my head as well as my feet (p. 322).'

"... experience showed that embossed illustrations which faithfully reproduced every detail of the inkprint original were confusing to the finger. Raised diagrams, it was found, needed editorial judgment as to what to include and what to omit.

"This was particularly evident in map-making, a subject of continuous study by both educators and mobility specialists. Blind persons could be helped to extend their travel skills if provided with tactual maps of unfamiliar locations. Extensive experimentation was under way in the Sixties and early Seventies on how to evolve a set of uniform symbols that would identify such features as steps, building entrances, mailboxes, bus stops, and such differing terrains as grass, paved roads, wooded areas, and bodies of water. The problem was not merely designating symbols but how to place them on embossed maps so as to provide guidance without clutter.

"Maps would undoubtedly continue to be needed, even when electronic mobility aids reached higher performance levels than was the case in 1972. As with reading machines, the effort to construct guidance devices had entailed heavy expenditures since World War II. At least two dozen separate attacks on the problem were made over a 25-year period; of these, three were still being actively pursued in 1972: the VA-Bionic Laser Cane, the Pathsounder, and the Kay Binaural Sensor.

"... The initial question was which of the possible energy bands to utilize: sound, supersonic energy, visible light, ultraviolet light. For the most part, the CSD- [the Committee on Sensory Devices of the National Research Council] supported projects concentrated on ultrasonic devices. All of them fell short, either because the information they provided did not yield a sufficient margin of safety, or because their signals were not clear enough to be genuinely useful (p. 360).

"Impressive as were the technological accomplishments represented by these three guidance devices, what emerged most clearly from a review of their performances was that all three were supplements to, and not replacements for, the more familiar mobility aids: the long cane and the dog guide (p. 363).

"Structured orientation and mobility programs now exist in virtually all schools for the blind and in a growing number of public school programs. These are expected to expand as additional trained peripatologists become available (p. 449)."

--Koestler, F. M. (1976). The Unseen Minority: A Social History of Blindness in the United States. New York: David McKay, Inc.

"Challenging the Process

1. Search for Opportunities
2. Experiment and Take Risks

Inspiring a Shared Vision

The first part of the paper is devoted to a discussion of the
 various methods which have been proposed for the determination of
 the rate of reaction between a radical and a molecule. The
 most common of these is the method of initial rates, in which
 the initial concentration of the radical is varied and the
 initial rate of reaction is measured. This method is simple
 and direct, but it is subject to a number of errors, and it
 is often difficult to obtain accurate results. Other methods
 which have been proposed include the method of half-lives,
 the method of integrated rate laws, and the method of
 continuous flow. Each of these methods has its own advantages
 and disadvantages, and the choice of method depends on the
 nature of the reaction and the accuracy required.

In the present paper, the method of initial rates has been
 used to determine the rate of reaction between a radical and
 a molecule. The results are shown in Table I, and it can be
 seen that the rate of reaction increases with the concentration
 of the radical. This is to be expected, since the rate of
 reaction is proportional to the concentration of the radical.
 The results also show that the rate of reaction is independent
 of the concentration of the molecule, which is also to be
 expected, since the reaction is first order with respect to
 the radical.

The rate of reaction between a radical and a molecule is
 a function of the concentration of the radical, the concentration
 of the molecule, and the rate constant. The rate constant
 is a function of the temperature, and it can be determined
 from the Arrhenius equation. The Arrhenius equation is
 given by:

$$k = A e^{-E_a/RT}$$

where k is the rate constant, A is the pre-exponential
 factor, E_a is the activation energy, R is the gas constant,
 and T is the absolute temperature. The activation energy
 can be determined from the slope of a plot of $\ln k$ versus
 $1/T$.

In the present paper, the activation energy has been
 determined from the slope of a plot of $\ln k$ versus $1/T$.
 The results are shown in Table II, and it can be seen that
 the activation energy is 10.5 kJ/mol. This is a relatively
 low value, and it suggests that the reaction is a simple
 addition reaction.

The rate of reaction between a radical and a molecule is
 also a function of the nature of the radical and the molecule.
 In the present paper, the radical is a primary radical, and
 the molecule is a secondary alcohol. It is known that
 primary radicals react more rapidly than secondary radicals,
 and secondary radicals react more rapidly than tertiary
 radicals. It is also known that secondary alcohols react
 more rapidly than primary alcohols, and primary alcohols
 react more rapidly than tertiary alcohols.

The results of the present paper are in good agreement
 with the known reactivity of primary radicals and secondary
 alcohols. This suggests that the reaction is a simple
 addition reaction.

3. Envision the Future
 4. Enlist Others
 - Enabling Others to Act
 5. Foster Collaboration
 6. Strengthen Others
 - Modeling the Way
 7. Set the Example
 8. Plan Small Wins
 - Encouraging the Heart
 9. Recognize Individual Contribution
 10. Celebrate Accomplishments (p. 14)."
- Kouzes, J. M., & Posner, B. Z. (1988). The leadership challenge. San Francisco: Jossey--Bass.

"Planning within the public sector is not easy. Uncertain and unstable financial commitments frequently force agencies to fight to preserve what exist, rather than expanding or changing direction. By allocating the time and funds necessary to establish goals and missions, to assess the environment, and to establish priorities and direction for the future, the Commission provided itself with a coherent direction and a document which was used to not only maintain our position but, in fact, to expand our resources in a time of declining revenues... [It] gave CBVI, the smallest of divisions within the Department of Human Services, a competitive edge with other agencies because of the structure and focus it provided (p. 34)...

"Armed with a document which identified unmet needs in the visually impaired community, as well as a clearly defined mission, the Commission and its consumers began an educational campaign directed toward the general public, state bureaucracy and the state legislature. In New Jersey, state agency funds are increased either through the request of the governor (regular budget process) or by supplemental appropriations from the legislature. Since work on developing the plan began in mid-1983, the Commission was able to articulate goals and needs for the 1984 Treasury resulting in a 29% increase in funds. Appeals to the Legislature resulted in additional funds being appropriated in 1984... Four orientation and mobility instructors and four rehabilitation aides were hired (p. 32) ..."

--Krajczar, N. F., & DeLung, J. S. (1985). Towards vision and independence --the rewards of planning in a state agency. Yearbook of the Association for Education and Rehabilitation of the Blind and Visually Impaired, 3, 28- 34.

"Early efforts to help people learn to travel were successful because they embodied a number of effective teaching principles. A common sense methodology consisting of an analysis of tasks and a logical sequencing of learning experiences characterized the early training. Because many of the original instructors came from professions that related to movement efficiency, such as corrective therapy, they had a very practical focus, concerned mainly with observable behaviors. They stressed the most efficient techniques to accomplish a task and the effective use of sensory systems other than vision. As graduate training programs for mobility specialists were initiated, curricula were developed which tended to reflect those elements which had been viewed as effective in the early

programs. The similarity among clients allowed the use of fairly standard sequences and approaches.

"With the availability of graduate mobility specialists, services were opened to a wider range of visually impaired persons. Many of these individuals had congenital visual losses as well as behavioral and mental deficits which interfered with learning. Many were elderly and experienced other impairments. Thus, rather than teaching young, physically active, and generally highly motivated war veterans how to substitute information received through other senses to regain travel skills, mobility specialists found themselves concerned more with basic problems such as how individuals interpreted the sensory information received, how concepts were developed, how to effect behavior change, and, in general, how to organize a learning program responsive to the individual needs of each visually impaired person.

"It has become apparent that while changes in curricula and methodologies will continue, a solid background in principles of teaching and learning is of central importance to the mobility specialist so that adaptations in programming can be made to meet the needs of each individual (p. 527).

"A good example of the eclectic integration of different concepts into a teaching strategy is the currently popular use of 'behavioral objectives.' Many aspects of this approach, including the title, its focus on concrete observable behaviors, and the breakdown of learning goals into a hierarchy of discrete steps suggest its origins in behavioral learning theories. On the other hand, the emphasis that is given to the value of involving the learner in the development of a plan for learning and the motivational aspects of the learner being able to see clearly the whole picture of what is to be learned and to be able to appreciate the progress that is being made, clearly draws upon some of the concepts of cognitive theories.

"The teacher/practitioner, in his concern for finding out and using whatever works, seems more free than the learning theorists to pick and choose those concepts that will contribute to his effectiveness regardless of the seemingly conflicting origins of the ideas.

"The mobility specialist as a practitioner shares this concern for discovering the teaching methods and strategies that will enable his client or student to reach the agreed-upon goals. Certainly it is helpful if the practitioner has read and understood the works of learning theorists, but the practitioner's purpose is not to prove or disprove a particular theory but to aid the client to reach desirable goals.

"The teaching methods and strategies used by mobility specialists seem to incorporate ideas from different theories of learning, yet some consistency in these approaches seems to be emerging.

"Orientation and mobility specialists have generally relied on the traditional notebooks of mobility techniques as the basis for the curricula developed for specific agency or school programs. These techniques have included skills in using a sighted guide; indoor protective and orientation techniques; cane skills; techniques for traveling in outdoor areas, and crossing streets; techniques for travel in business areas, and using public transportation; and special techniques for situations such as using elevators, escalators, revolving doors, soliciting aid from sighted pedestrians, etc. These techniques have been organized and taught in a sequence that roughly approximates a hierarchy of skills for the person who has not traveled previously without vision

(p.531)...

"... [teaching] units may be needed for training in the areas of low vision, audition, proprioception, haptic perception, or in the area of posture and gait training. In some settings, other specialists such as occupational therapists, physical therapists, audiologists, and classroom teachers may be available to take responsibility for some of these prerequisite areas. Where they are not, it usually falls to the mobility specialist to provide needed learning experiences if the client is to benefit as completely as possible from mobility training.

"Many mobility specialists have not developed separate units to provide learning experiences in these prerequisite areas. Some attempt to provide the needed learning opportunities within the basic mobility lessons where the primary aim may be the learning of mobility techniques, but certain concepts or perceptual skills have to be developed in order to be effective with the technique. Some mobility specialists may feel that the training of perceptual skills in the actual situations where they are needed is more effective than practice in artificial situations with the hope of transfer to the real situation. Of course, the effectiveness of the methodology probably relates to the seriousness of the learner's deficiency.

"... Orientation and mobility instruction, by its nature has always contained a level of concrete specificity that exceeds other types of teaching and human service...

"... Part of the mobility instruction process must focus on helping the client to develop sound judgment in a variety of quite different situations. Can the client be helped to function at a realistic level of risk taking? Can the client be helped to stay calm and make good decisions under the stress of being disoriented? Can the client learn to control his emotional reaction when approached by a helper who assists in a patronizing way? Can the client learn to be an effective problem solver? While each of these behaviors can be defined behaviorally, it is difficult to define which behaviors can be considered to demonstrate sound judgment (pp. 532- 533).

"... teaching orientation and mobility skills to adults, necessitates that the problems be thought of as the person's inability to travel independently. While the mobility specialist will usually hear of this 'problem' first through some third party, such as the referral source or the rehabilitation administrator who assigns the case, it is important that the specialist hear the client's own view of the problem at the very first opportunity. Generally the problem will be remedied best as a result of the client learning a set of new skills that will enable him to travel independently. Occasionally, however, it may be that the desire to have the client take mobility instruction resides more with the client's counselor, spouse, or parent than with the client. This is quite a different problem, and one which will probably not be ameliorated by instruction.

"A preliminary meeting between the mobility specialist and the client can provide the specialist an opportunity to hear from the client why he has come for instruction and what he hopes to accomplish. The specialist can share with the client what mobility instruction involves and the kinds of things that some clients have been able to accomplish as a result of instruction. It is important for the client to be able to express his goals and expectations from the instruction. Although it is likely that a client's initial goals will change in the direction of accomplishing

either more or less than originally hoped, it is essential that both the mobility specialist and the client have some mutual understanding about the purpose of their work together. For both parties, the preliminary contact can be an opportunity to begin to develop the trust and rapport that will be helpful as instruction progresses.

"It is important to distinguish between two terms, assessment and evaluation, that are used differently among professionals and in the literature. Both terms refer to a process of making a judgment about an individual or situation based on information that has been collected. For the purpose of this discussion, assessment is used to indicate the data collection and decision making that goes on prior to the instruction for the purpose of deciding whether or not instruction should be provided and for planning the most appropriate type of lesson sequence. On the other hand, evaluation will be used to refer to the analysis and judgment that will be made about parts of the instructional process that have already taken place. The problem solving approach calls for evaluations to be made frequently throughout the instructional process to consider how it is proceeding and, if necessary, to make modifications in the program. The term evaluation will also be used to refer to the summative review of what the client has accomplished at the end of the instruction for the purpose of writing a formal report of the client's success and abilities in orientation and mobility. Evaluation will also be used to denote efforts to analyze the mobility instruction program itself and to judge its effectiveness (pp. 533- 534).

"... almost all visually impaired clients will be able to benefit from instruction in some way. The mobility specialist uses the assessment process not to eliminate some clients from training, but to determine both the client's actual needs as well as the type of learning program that will best meet those needs (p. 535).

"Mobility specialists, as a result of their experience with actual performance and functioning of clients and because of their emphasis on such practical matters, have learned that the results of clinical and isolated examinations in many of the areas discussed above do not necessarily describe the abilities of the client. Sometimes when clients are given an opportunity to demonstrate their skills and abilities in actual travel situations, they may do better or worse than the preliminary tests had led the mobility specialist to expect. This may be because of the validity and reliability of the examination procedures in the different areas, or perhaps because of the difficulty of understanding the complex reality of the whole person in particular situations. A client may do worse than anticipated as a result of the fear and anxiety that the real situation generates, or may do worse in the clinical testing situation where he is less sure of what is expected of him and where he feels the pressure to perform. On the other hand, the client may perform more adequately in the actual travel situation as a result of the motivational properties of accomplishing a particular task. Awareness of this phenomenon has grown particularly in relation to the visual functioning of low vision persons.

"As a result of the discrepancy that is sometimes found between clinical findings and actual performance, mobility specialists usually include performance runs or functional evaluations as part of the fact gathering and assessment. Clients are put into travel situations and given an opportunity to demonstrate their abilities. Mobility specialists

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author provides a detailed overview of the various methods used to collect and analyze data, highlighting the strengths and weaknesses of each approach. The text is written in a clear, concise style, making it accessible to a wide range of readers.

2. The second part of the paper focuses on the challenges faced by researchers in this field. It identifies several key areas where further research is needed, including the development of more sophisticated statistical models and the integration of qualitative and quantitative data. The author also discusses the importance of collaboration between different disciplines, such as economics, sociology, and psychology, in addressing these complex issues.

3. The third part of the paper presents a series of case studies that illustrate the application of the research findings in real-world contexts. These examples demonstrate how the principles discussed in the previous sections can be used to solve practical problems and improve organizational performance. The author concludes by summarizing the main points of the paper and offering suggestions for future research.

4. The final part of the paper is a conclusion that ties together the various threads of the discussion. It reiterates the importance of rigorous research and the need for continued exploration in this field. The author expresses optimism about the future of the discipline and the potential for new discoveries that will advance our understanding of human behavior and social systems.

observe this functioning and attempt to evaluate both the overall abilities and some of the components that go into the skills being performed.

"It has been common practice in orientation and mobility to treat the first 5 to 10 hours of instruction as an evaluation or assessment period. Usually the client is taken through the first few lessons with the mobility specialist making inferences from this performance about future instructional needs. This is necessary in those settings where the hours of instruction must be projected so that authorizations can be written by the agency funding the service.

"Gathering information about a client's abilities does not usually extend to the kind of advance skills that come later in the program, such as crossing streets and dealing with people. It would be impractical to put many clients into advance travel situations where they do not have the skills to cope with them. People with low vision or with previous training or travel experience are frequently evaluated in a range of situations in which they have sufficient vision and travel experience to maintain their safety, and where the purpose of the assessment is to learn more about how the client uses his vision or his techniques under those conditions (pp. 536- 537)...

"The selection of goals for the training may have to deal with such difficult decisions as to whether or not the client will be able to travel independently at all or will be restricted to sighted guide travel only. Will the client be able to become a totally independent traveler in all situations, or will he have to limit his travel to familiar routes? In a few situations it may be possible to predict such outcomes early, but more frequently such realities only become clear gradually during the period of instruction. In situations where the potential of the client is unclear, the mobility specialist must not raise expectations unrealistically, but at the same time avoid taking away the client's motivation to try. In other words, the assessment process should result in a tentative plan viewed as changeable by all parties involved (p. 528).

"... the use of reinforcers in learning situations [is complex], especially when interaction with the instructor is considered a reinforcer. The mobility specialist should try to understand the reactions of each client to the training situation and gear the use of reinforcers to the particular situation.

"... shaping, or the method of successive approximations... involves the rewarding of behaviors that are somewhat like the desired terminal behavior, gradually applying the reward for behavior which is closer to the desired terminal behavior until the client is performing adequately. In order to use shaping techniques, the mobility specialist must be able to analyze complex terminal behaviors into component parts arranged from the simplest to the most complex.

"The individualized instruction that has characterized mobility services facilitates shaping or teaching by successive approximations. When teaching one-to-one, the mobility specialist is able to control the difficulty and the complexity of any problem that the client will experience by stepping into the situation at a particular point. For example, if a client veers while crossing a residential street, he may cross the intersection diagonally, end up at the wrong corner of the intersection, and proceed in what may seem like the correct direction but is in reality quite wrong. The mobility specialist may allow the client

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to follow this erroneous course until he discovers himself that a mistake has been made. At that point, if the instructor still remains distant from the client, he is structuring the lesson to include recovery from the error, which will require a high level of skill. However, the mobility specialist can limit the level of difficulty of the task at any of a number of points along the way depending on his objectives for that particular lesson. He can halt the client at the point of stepping up on the opposite curb, telling him that an error has been made, and then leaving him to recover from that point. Or, the mobility specialist can inform the client, while he is still in the street, that he has veered into the parallel street and encourage him to make the necessary corrections. The specialist, observing that the client is lining up for the crossing in such a way as to make a diagonal crossing likely, may ask the client to check alignment before crossing, gearing the lesson to a still different level of difficulty. Ultimately the client will need to be able to perform even the most complex of these tasks, but the mobility specialist is usually able to control the level of difficulty according to what represents the most efficient learning experience for the client during that particular lesson.

"Another aspect of teaching orientation and mobility is that it must go beyond the teaching of specific techniques and beyond the negotiation of certain types of environments to the learning of critical rule relationships about travel without vision in an environment that has certain consistent features. This is especially important for clients who may lack adequate spatial concepts of the environment, but who are nevertheless able to travel independently by the application of certain rules (pp. 540- 541)...

"The mobility specialist is constantly gearing his instruction toward helping the client discover and use rules that are made possible by the degree of consistency in the makeup of the environment...

"Once the client has experienced some success in recognizing and using some of the basic rules he is ready for the next step, which is the recognition that rules change. For example, one might learn that in a particular area, odd numbered houses are on the west side of the street. The lessons may then progress to the point where in crossing a major division street the client learns that the rule no longer holds but is actually reversed. In fact, the changeover of even-odd sequences on each side of a division street is fairly common (p. 542).

"Another concept related to the implementation of a learning plan in orientation and mobility is the importance of practice... Without the opportunity to practice the learned skills, retention will be very poor, especially for psychomotor skills.

"Providing meaningful and sufficient practice opportunities may be difficult in certain programs... special attention [should] be given by the mobility specialist to building in and encouraging whatever could be useful and appropriate in practice opportunities for his clients. This issue also reinforces the importance of building in sufficient lesson times for each client each week (p. 543).

"... Throughout the process, the mobility specialist and the client should remain open to the possibility that the original assessment about the nature of the problem or the methods of proceeding may be incorrect or insufficient. At that point it becomes necessary to rethink the situation

2. The second part of the document focuses on the financial aspects of the organization. It provides a detailed overview of the budget, including the projected income and expenses for the upcoming year. This section also discusses the various financial risks and how they can be mitigated, ensuring that the organization remains financially stable and secure.

3. The third part of the document addresses the human resources of the organization. It discusses the current state of the workforce, including the number of employees, their skills, and their experience. This section also outlines the various strategies used to attract and retain talent, ensuring that the organization has a strong and capable workforce.

4. The fourth part of the document discusses the marketing and sales efforts of the organization. It provides a detailed overview of the various marketing campaigns and sales strategies used to promote the organization's products and services. This section also discusses the various challenges faced in the marketing and sales process and how they can be overcome.

5. The fifth part of the document discusses the overall performance of the organization. It provides a detailed overview of the various key performance indicators (KPIs) used to measure the organization's success. This section also discusses the various factors that have contributed to the organization's success and how they can be leveraged to achieve even greater success in the future.

and to develop a new assessment or methodology that takes into account newly discovered information...

"Usually the mobility specialist will be charged with writing a final evaluation on the student to be reported to the funding source and to become a part of the client's file at the agency. Such reports should be written as accurately as possible and with sufficient detail to clearly communicate the client's accomplishments as well as any limitations that are necessary. These reports are frequently used by other professionals in planning future activities with the client, such as those related to vocational placement or further education. In addition they become an official statement of the services rendered by the agency and the mobility specialist. This information is important in evaluating the overall effectiveness of the agency and in contending with any charges of malpractice or liability that might be brought by a dissatisfied client (pp. 544- 545).

"Because certain principles can be generalized from one area to another, the mobility specialist learns to anticipate which clients are going to have difficulty in using formerly learned skills in new areas. On the other hand, studies of transfer of learning as well as common sense suggest that the more thoroughly a person has learned a particular skill the more likely he is going to be able to transfer it to new areas. Therefore, the effectiveness of the learning process and the intentional use of over learning, where possible, will enhance the possibility of transfer.

"... If the original learning takes place in an artificial environment that is very different from the actual travel environment, transfer is less likely to occur. For this reason mobility specialists have insisted on the need to conduct lessons in actual environments representing a cross section of the areas through which a typical client will travel independently following completion of training. There have been occasional efforts to develop simulated environments for mobility training, but while simulated environments serve a limited purpose in a training program, they are usually too different from real environments to be considered adequate preparation for travel...

"Clients can be helped to learn to transfer skills to new areas through the use of self-familiarization lessons in the program. The client is taken to a new area after acquiring the level of skill necessary for that type of area and instructed to explore the area in a way so as to gather sufficient information to travel independently there. This type of lesson can be used in indoor, residential, and business areas, and can be structured to allow the client to use or not use the assistance of sighted passers-by. The mobility specialist can observe and feedback information to the client about the strategies used in dealing with problems and the conclusions that the client drew from available information...

"The transfer of newly learned skills to new areas may also be impeded by the nature of the reinforcers available in the new area. First, the client should learn to monitor his cane technique and not depend solely on feedback from the instructor in determining the adequacy of his cane coverage. After completion of training if the client finds that he brushes objects with his shoulder frequently, he should be able to interpret this deterioration of cane coverage that needs correcting. Unfortunately, or not as the case may be, the environment is structured in such a way that the client does not experience negative consequences every time he is 'out of step' with his cane or every time his coverage is

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4. The fourth part of the document discusses the marketing and sales aspects of the organization. It provides a detailed overview of the marketing strategy, including the various channels used to reach the target audience. This section also discusses the various sales techniques used to convert leads into customers, ensuring that the organization is able to maximize its revenue.

5. The fifth part of the document discusses the legal and regulatory aspects of the organization. It provides a detailed overview of the various laws and regulations that apply to the organization, ensuring that it is in full compliance with all applicable laws. This section also discusses the various legal risks and how they can be mitigated, ensuring that the organization remains legally sound and secure.

6. The sixth part of the document discusses the environmental and social aspects of the organization. It provides a detailed overview of the organization's environmental and social impact, including the various initiatives used to reduce its carbon footprint and improve its social performance. This section also discusses the various risks associated with environmental and social issues and how they can be mitigated, ensuring that the organization remains environmentally and socially responsible.

7. The seventh part of the document discusses the overall performance of the organization. It provides a detailed overview of the various key performance indicators (KPIs) used to measure the organization's success, including revenue, profit, and customer satisfaction. This section also discusses the various strategies used to improve the organization's performance, ensuring that it is able to achieve its long-term goals.

8. The eighth part of the document discusses the future of the organization. It provides a detailed overview of the various opportunities and challenges that the organization is likely to face in the future. This section also discusses the various strategies used to prepare the organization for the future, ensuring that it is able to remain competitive and successful in the long run.

deficient. If this was the case, cane skills would not deteriorate as quickly, or perhaps not at all, as a person moved farther away from his training program. Many people, however, develop a tolerance of the occasional bumps and collisions and overstepped curbs that do occur when cane techniques are less than perfect (p. 546).

"Also, at home, family members may, for a number of reasons, discourage the client from traveling and transferring his skills to the new environment. Once again behaviors that had been reinforced in the training situation are now being extinguished. The mobility specialist may visit the home area to help orient the client, and at the same time discuss with family members the client's need for encouragement and help in transferring the skills he has learned (p. 547)."

--LaDuke, R. O., & Welsh, R. L. (1980). Educational aspects. In Welsh, R. L., & Blasch, B. B. (Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 527- 548.

"Our studies in the early 1960's, which led to the introduction of a formalized university training program for mobility instructors, clearly indicated that the vast majority of blind persons in the United States are unable to travel independently. While we have made some impact through the training of special mobility instructors and the development of comprehensive rehabilitation centers for the blind, it is still a fact that the majority of blind persons... are unable to move about independently... If we use the current prevalence statistics available... and measure these against the backdrop of our own experience, it would seem conservative indeed to estimate that there are probably 100,000 blind persons in this country today who could profit from a modicum of travel instruction (pp. 369- 370)..."

--MacFarland, D. C. (1972). Social services and blindness. In Hardy, R. E., & Cull, J. G. (Eds.) Social and Rehabilitation Services for the Blind. Springfield, Illinois: Charles C. Thomas, 366- 378.

"... the client [needs to] be scheduled for mobility during various hours of the day in order to take advantage of various situations. For example, traffic at 9:00 a.m. may be less hazardous or may be lighter than traffic at 8:15 a.m., or it may be lighter than traffic at 3:30 p.m. So mobility instruction should be varied as far as time of day to encounter different kinds of traffic situations, especially in the wintertime. Traveling in snow at 8:15 a.m. before people are out to shovel their walks or stamp down paths may be more difficult than traveling at 10:15 a.m. Along these same lines mobility instruction should be expected to continue in all kinds of weather within reason. The clients are going to be expected to attend their jobs or classes no matter what the weather conditions happen to be --rain, snow, etc.

"Daily lessons are also of utmost importance for the progress of the client. In some cases where the student has become a fairly competent traveler, the daily instruction may be reduced to possibly three times a week. But certainly at the outset and through most of the training, I would insist upon daily instruction for every client in my program (p. 119)."

--Malamazian, J. In Head, D. N. (1972), Procedures for the activation of an orientation and mobility program. Blindness, 117- 128.

"Only a limited number of colleges and universities offer specialized training in work with blind and visually impaired persons...

"Low salaries and limited benefits in rehabilitation work for the blind do not enhance recruitment and retention...

"Rates of retention indicate clearly that, in most cases, salaries and fringe benefits in our field are not competitive with related areas of employment. The field seems to be overly dependent upon sources of professional satisfaction other than salaries and fringe benefits competitive with other employment...

"It seems more likely that employers in work for the blind do not maximize the use of the highest skills of their professional personnel. Agencies frequently overemphasize drab routine paperwork, thereby utilizing the talents of a professionally trained person in a very restricted manner...

"Rehabilitation agencies should give increased attention to fostering professional growth and development. We would do well to acknowledge clearly and openly professional contributions of staff members by extending to them opportunities for involvement in programming and administrative decision-making (p. 170)."

--Metcalf, V. (1987). Recruitment and retention: Identification of issues in rehabilitation. Education of the Visually Handicapped, 18, 169- 171.

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved. The author argues that without accurate records, it is impossible to make informed decisions or to identify areas for improvement.

2. The second part of the paper describes the various methods used to collect and analyze data. It outlines the steps involved in designing a study, selecting a sample, and collecting data. The author also discusses the importance of ensuring the reliability and validity of the data collected.

3. The third part of the paper presents the results of the study. It shows that there is a significant correlation between the accuracy of records and the success of the business. The author also identifies some of the factors that can lead to inaccurate records, such as poor training and inadequate resources.

4. The final part of the paper offers some suggestions for improving record-keeping practices. It recommends that businesses should invest in training and resources to ensure that all employees are properly trained in record-keeping. It also suggests that businesses should implement a system of checks and balances to ensure that records are accurate and up-to-date.

"The rehabilitation agency in the broadest sense has the overall responsibility for assisting the blind person in meeting those needs which will enable him to function at his maximal potential despite his handicap. They include a thorough medical, vocational, psychological, and social diagnosis and a plan of rehabilitation services based on these diagnoses and the delivery of the requisite medical, social, training, counseling, and placement services needed to achieve the goal of the rehabilitation plan... In addition to these services, and perhaps in the long run of even more importance, is the need of the blind person to learn to manage and accomodate to the constraints which blindness puts upon him. Some of the elements, such as the following, involved in the personal management of blindness can be taught by competent instructors and learned with varying degrees of effectiveness by blind persons who are motivated to strive to achieve independence: (1) Mobility and orientation skills which enable a blind person to move from one place to another with a maximum of efficiency, comfort, and safety and with a minimum of emotional stress. The degree of mobility which can be achieved, of course, varies with each individual's capacity (p. 187)."

--Rives, L. H. (1980). Realistic needs of the blinded individual. In Hoehne, C. W., Cull, J. G., & Hardy, R. E. (Eds.) Ophthalmological Considerations in the Rehabilitation of the Blind, 185- 188.

"As a viable supplement to traditional campus-based personnel preparation programs, university outreach training programs provide for meeting personnel needs previously underaddressed in rural areas. By providing for a 'home-grown' trainee population, outreach programs address recruitment needs for university programs as well as assist local rural agencies to fill vacancies and provide services to visually impaired... [consumers] (p. 173).

"There is no question that the need for orientation and mobility (O&M) services is widespread in the United States. National data indicate that over the past 3 years the number of visually impaired infants and preschoolers increased 43% and 52%, respectively... In addition, the number of visually impaired persons is expected to grow 12% during the last half of this decade... It is a great concern that while... [there will be]... increasing numbers of [the] ... visually impaired..., the number of O&M graduates from universities remains approximately the same... Personnel shortages mean that many... visually impaired students are without appropriate O&M services... These shortages are particularly acute in rural areas where fewer specialists are available (pp. 173- 174)...

"Specific problems in the preparation of O&M professionals to work in rural areas focus both on the recruitment of persons to fill vacancies in rural areas and on the logistics of serving... in very isolated areas. Some typical problems of rural conditions result directly from the fact that those... with visual handicaps may be widely scattered over a large geographic area. Often, there is only one visually impaired ... [person]... in a... district and... districts may be many miles apart. The time and distances involved in travel lessen the frequency of student contact with the O&M specialist.

"... The difficulty of traveling from rural areas to sites needed for teaching urban skills such as the use of escalators, elevators, revolving

doors, and mass transit is a further complication of rural O&M training. Rural students need this training so they can function when necessary in nearby cities. Consistent development of these skills often has a low priority because of the need for local training and the expense of going to urban sites for training.

"... University training of O&M Specialists is usually focused on urban rather than rural needs. Typically, potential teachers are trained to help students travel in semi-business areas, to learn grid patterns of urban residential streets, and to cross busy streets at lighted intersections. Few university programs offer training in the use of landmarks and travel skills specific to rural areas.

"... Inservice training activities are not available to rural O&M specialists who take rural jobs. Due to great geographic distances, teachers in rural areas may be unable to travel to inservice activities, which usually are held in urban areas. In addition, O&M specialists are often the only such specialists in the entire... district and may lack regular opportunities to consult and exchange ideas with colleagues. The lack of opportunity for professional exchange is often cited by O&M specialists as a disadvantage to working in a rural area (p. 174).

"... University O&M personnel preparation programs also face difficulties in recruitment, practicum placement, and curriculum expansion. Universities require a minimum enrollment to conduct a class. The lack of numbers for class enrollments at universities that are accessible to rural areas further complicates the problem of developing rural training programs. The relative scarcity of available O&M specialists in rural areas may make it difficult to find certified specialists who can serve as cooperating teachers for university students completing internships. Often, students attending rural university programs find jobs in urban agencies and school districts more attractive because of the availability of support systems, inservice training, facilities, and resources...

"... The outreach concept is one possible solution to the problems of training O&M specialists for rural areas. In outreach the university training program is offered throughout a state or region in cities that are accessible to rural areas. These programs are in addition to a campus-based program at the university's main campus in a metropolitan area. The outreach program offers courses identical in content, requirements, availability of reference materials, handouts, audiovisual materials, and contact hours to those taught in the main campus. Students are required to meet the same standards as on-campus students in classwork, examinations, research, and class attendance. Audiovisual materials used in university-based classes are made available for outreach classes, and advisement time is included in such programs. Because library resources are often not accessible to students in rural areas, selected journals, books, and other resources are often brought to the outreach campus and loaned to students.

"Students enrolled in the outreach program are often part-time students, who work during the week at teaching or other jobs. Courses can be taught on the weekends to accommodate their schedules. Because a typical 3-unit course usually requires a minimum of 45 contact hours, only one course is brought to an outreach city each semester. Summer courses are often taught full-time during the week when teachers taking the graduate courses are on vacation. Depending on a university's schedule of classes, two courses can often be taught during most university summer

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sessions.

"Universities frequently require a series of core courses to be completed by all students enrolled in a degree program. Students enrolled in classes in an outreach city generally come to the main university campus during a second summer session to complete the core requirements. These part-time students probably can complete the degree requirements of a 36-unit program (allowing for the transfer of up to 9 hours) in 2 years (including summers) or slightly more (p. 175).

"... Organization of the O&M outreach program focuses on the special characteristics of local needs and resources. Planning requires personal interaction with top level administrators at the various... systems that would be involved. University personnel must travel to potential sites to work out procedures and service needs. Local entities, such as regional education service centers, cooperatives, and/or state commissions for the blind, work with university personnel to arrange and fund faculty travel, student recruitment, release of time, if needed, for students to attend class, and other provisions for class attendance. Local school districts usually provide the site, classroom equipment, and local publicity about the training... In recruiting students for the outreach program, an important factor to consider is that potential trainees should receive merit recognition for their time and achievement of a higher level of skills.

"Federal and state grants, as well as grants from private foundations, are excellent sources of funding for outreach programs. Local entities or the university responsible for offering the outreach program can write the proposals. Outreach courses should be counted as part of a faculty member's teaching load; the university is responsible for their salaries.

"... One reason for offering a teacher training program in rural areas is to fill vacancies in areas where service has been previously undeveloped or limited. Many rural areas have difficulty attracting professionals to fill vacancies. By providing training programs in rural areas, universities can attract as students local professionals prevented by family and vocational commitments from attending programs in metropolitan areas. These same ties lead graduates to fill the vacancies in their rural areas rather than move to metropolitan areas in search of a job. Graduates often enter their new job knowing the [consumers]... they will serve and having already established a strong rapport with students, parents, and school and community personnel.

"... The development of training sites in rural areas emphasizes a strong familiarization with, and understanding of, local travel conditions and needs. Attention to local sites can foster increased community awareness of the benefits of O&M training. O&M instruction focuses on the abilities of blind people to travel independently as they function as contributing members of the local community. The independence and increased confidence of those who receive good O&M training can strengthen the community support of such special education programs (p. 176).

"... Students in the program often know the [consumers] ... whom they will be serving upon graduation. Students will have the opportunity to emphasize relevant areas of study and to question professors regarding the characteristics of specific ... [students] they will be teaching in the future. Students are aware of local needs and can appreciate the potential for the specific application of relevant concepts, theories, and

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service to rural sites. This relevance of training heightens the motivation of students in outreach O&M training programs. As many of the graduate students are concurrently employed as teachers in their home rural area, they can immediately use their new skills and competencies with the... visually impaired students they may already teach. This heightens the value of experiential application of theory learned in class. In addition to developing the same skills as in campus programs, these graduate students will have the added advantage of practical experience in applying the skills in their local area (p. 177).

"... O&M specialists indigenous to the area where they will work are aware of commonly used travel routes and opportunities and other relevant information. They can utilize this knowledge with maximum efficiency when teaching visually handicapped students. Also, teacher trainees have a previously developed rapport with family and with other professionals who will be working with the visually handicapped... Usually the trainees are already within the professional milieu and are aware of local strengths and weaknesses in dealing with [the] visually handicapped... Furthermore, these trainees know of potential resources that might not be available to a stranger in the community... knowledge of rural relationships is essential to optimum service delivery for educators. An example of this is the knowledge of school administrative procedures, support, and students.

"... Outreach programs can bring the curriculum to potential preservice educators who otherwise could not have the training. Many potential O&M specialists are unable to take a year without income and move to a metropolitan area to participate in a university training program. Making the training available to such persons provides a pool of potential students who can meet the recruitment needs of university programs and will go on to meet the need of O&M specialists in rural areas.

"... Because a large percentage of students in the orientation and mobility outreach programs are already teachers, they have an educational maturity based on years of experience... This background and skill in teaching can be applied immediately to orientation and mobility instruction.

"... With necessary planning and optimum involvement of faculty, local educational personnel, and potential trainees, the outreach program can provide benefits to [the] visually handicapped... and the larger community. Outreach programs can address difficulties in recruiting O&M professionals to fill vacancies as well as recruitment of students for universities. Students graduate from an outreach O&M program more aware of local community needs and values regarding O&M than if they had received training at a remote university campus (p. 178).

"The values of such programs, therefore, are intrinsic to the nature of the training...

"Texas Tech University in Lubbock, Texas is successfully conducting outreach programs in personnel preparation (O&M & VH). The potential for the outreach concept to address successfully the need for O&M instructors in rural areas is significant. With careful coordination of efforts between universities, local school districts, state commissions or agencies for the blind, private agencies, education service centers, and education cooperatives, outreach programs can be administered efficiently and effectively in any geographic region of the country (p. 179)."

4. The fourth part of the document discusses the implications of the findings. It suggests that the results of the study have significant implications for the field of research and may lead to further developments in the future.

5. The fifth part of the document concludes the study. It summarizes the main findings and provides a final statement on the importance of the research.

--Rosen, S., & Sowell, V. (1989). Training of orientation and mobility specialists for rural areas. Education of the Visually Handicapped, 20, 4, 173- 179.

"The itinerant mode of service delivery has proven to be extremely popular with and relevant to the aged...

"Orientation and mobility taught in the home community has proved to be most beneficial as expressed by student feedback and apparent results...

"Training with the low vision aids in the exact physical conditions they are to be used has shown a far better acceptance rate than anticipated."

--Schwab, P. D. (1977). The older blind in an itinerant rehabilitation program. Journal of Visual Impairment and Blindness, 71, 405.

"Persons with high levels of these three types of power have a greater capacity to influence others than do persons lacking in one or more sources of power (p. 2)...

"The three types of power that enable effective leadership--position, expert, and referent--have evolved as civilized societies have evolved (p. 3)...

"In brief, expertise is so dispersed, so specialized, so transient, and so essential in the competitive world marketplace that leaders are highly dependent on followers for much of the knowledge needed for survival...

"... the leader's trust in the group and its members' trust in each other has led to the empowerment of the group, and reciprocally to its further empowerment of the leader (p. 5)..."

--Smits, S. J. (1990). Leadership and followership: the impending paradigm shift. Paper presented at the 1990 Southern Futurist Conference, May 19, 1990, Daytona Beach, Florida.

"Recruitment from traditional training programs for teachers of the visually handicapped into rural areas is an unrealistic goal for present, financially constricted conditions. Young people receiving training in these university programs are in such demand that there is no incentive for graduates to go into rural areas. The graduates are often younger teachers who desire the flexibility and support services provided in large city... systems. They do not feel confident in taking jobs where other resources will not be available to augment their beginning teaching experiences.

"This lack of support services in rural areas is well documented... and many younger graduates are unwilling to think in terms of longitudinal program development when they are actively recruited by larger, richer, more advantageously located [programs]... Furthermore, their training programs often include various resources such as closed circuit TVs, various media devices, Optacons, agencies, etc., which may be scarce or unavailable in rural programs.

"Moreover, there are few training programs that give students access to methods and procedures for developing resources in a previously

undeveloped local... agency or rural cooperative...

"The need for training as teachers with orientation to rural society is also necessary to enable teachers of the visually impaired to be aware of sources to obtain materials and other support services. For instance, the members of the community with family background or traditional interest in certain ideas could be recruited as volunteers or for financial assistance in certain programs. An example of this might be a person whose grandmother was blind and who would, therefore, be interested in serving as a volunteer reader to tape materials for blind students. Another person, whose handicapped child had been unable to get viable employment, might be interested in vocational... programs... An effective teacher must be aware of these potentially important relationships.

"An outreach program for VH teachers is efficacious because of the incorporation of a full gamut of training, including orientation and mobility training for visually handicapped students. This training must be situated in the rural community in order for routes to be learned outside the traditional model of curbs and blocks, buildings, public transportation, etc. When streets and lights are not available, other landmarks, such as trees, fences, and variations in walking surfaces must be utilized. Development of routes when clues include farmyard sounds, small business emanations, and limited traffic must be incorporated into the training program...

"Another factor influencing the special training for teachers in rural areas is the relative isolation of the teacher... The isolation of the teacher leads to problems of teacher 'burnout,' and a sense of alienation when no other person is knowledgeable about the professional interests of the teacher (p. 14)...

"Problems in delivering services in rural areas are well documented and of varied nature. The personnel preparation programs which do not incorporate this data base into training programs will not provide graduates with essential components in their educational experience (pp. 14- 15).

"... The strengths of the outreach model involve continuity and ability to meet the needs of the rural communities... The model trains these graduate students in the necessary skills leading to the credential as teachers of the visually handicapped and O&M specialists. All course requirements, reference materials, textbooks, and resources are equivalent to on-campus courses. The difference is in the examples and local references in discussing class topics. Students in the courses are those who cannot leave families and/or positions to move to campus programs. Their value is their knowledge of, and commitment to, the local community.

"Once trained, they remain in the rural areas to provide continuity of services... Their involvement in the community power structures would enable them to utilize more effectively the community resources. Their ties to the community provide a source of strength for programs because their qualities are already recognized and they do not have to 'prove' themselves.

"A knowledge of the informal ecological systems is another factor that adds to the strength of the outreach model. People who have already been involved in the community know who has resources... whose abilities can be utilized to enhance the program, and whose backgrounds would be useful in developing plans for systems... This knowledge base enhances not only the use of resources but the facilitation of programs in terms of

timelines. Often, years of preparation can be avoided when the teacher is already a part of the community and knows the various power structures involved...

"On-the-job training is an integral component of the outreach model. Trainees work with students already identified as needing services... The strength of this approach is that individual needs can be met more easily within the context of this additional knowledge. However, the lack of resources... can lead to difficulties in realizing educational goals (p. 15)...

"... The outreach model is based on the needs assessment of an Education Service Center or other state agency with interest in rural areas...

"The model provides for a request to a higher education agency approximately one year in advance for training based on the needs assessment... The higher education agency is then contacted for services and training to be conducted within the rural area rather than on the university campus.

"This is the strength of the model in that many teachers and administrators in rural areas are unable to attend courses and training programs at distant sites which may not be aimed at the educational situation of the particular rural area involved.

"Within this model, the higher education agency can develop programs with specifics aimed at the needs of the community within the larger context of the competencies and skills which must be developed for trained teachers. In Texas, the higher education agency plans approximately a year in advance to commit faculty to travel to rural areas. The faculty will teach the series of courses leading to the credential as a teacher of the visually handicapped.

"Schedules for training are usually set approximately a year in advance. The most successful schedule so far has utilized alternate Saturdays and possibly Friday nights for teachers to come to a centralized location within the rural area for training...

"Textbooks and materials are brought to the rural area by the faculty or shipped by plane or bus. These materials include handouts, films, and all references copied and organized in folders that will be needed for the coursework. This involves long-term planning and commitment of financial resources for the copying of the handouts which will be needed when no nearby library is available. In addition, textbooks are sent from the university bookstore and checks are taken back by the faculty member to pay for the textbooks needed. An important factor is that often extra textbooks are utilized because of the lack of library resources. The cost of the textbooks is usually borne by the students or by the sponsoring education agency.

"The Education Service Center is involved in the outreach model as a sponsoring agency and dissemination center for the faculty member and students who will be taking the classes. The Education Service Center then writes a proposal to the higher education agency requesting the courses at least a year in advance.

"In Texas, the Education Service Center usually writes a grant to help fund the travel and material costs for the courses. All reference materials must be copied and inserted into labeled folders for the use of students, since library materials are not available.

"When the courses are to begin in the fall, notices are sent to local education agencies and special education cooperatives regarding the

possibility of courses being offered, types of credit to be offered, locality, and approximate costs of the courses. Students are requested to register with the Education Service Center personnel if they are interested in the courses. The service center also provides facilities for the meeting of the classes, usually on Friday and/or Saturday. The coordination of the classes in terms of receiving materials, which are sent by plane or bus, and arranging for notification are arranged by the service center. The recruitment of students is also the responsibility of the service center through its advisory board of local special education cooperatives. Approximately 12 to 15 students is the optimum number for the courses.

"Coursework involves a 21-hour sequence which counts toward a graduate degree at the university. Courses are designed to cover needed competencies as delineated by Spungin... as well as the rural emphasis developed by Helge...

"... All graduate courses require research and this is often difficult for students in isolated rural areas without the usual library facilities found on the campus. In these cases, students usually discuss research interests with faculty members and the needed library or other references are obtained from the campus and mailed to the student. In certain instances, students are able to use research libraries at closer higher education institutions; however, this is usually not feasible because of the lack of programs related to visually handicapped persons.

"Another factor that enhances the implementation of the program is the stress on frequent field trips, which are arranged for students to allow for the needed scope and breadth of learning. These field trips usually relate to the regional commission for the blind offices, any facilities for severely involved children, residential facilities and state schools, observation of experienced ophthalmologists, etc.

"A regional resource book is always developed as a part of the course work for the introductory course. This resource book lists such needed local services as pediatricians; ophthalmologists and optometrists who work with... [the] visually handicapped... and voluntary and public agencies which serve... [the] blind... The resource guide also includes material on state and national resources which may not be easily available in one reference. Students are encouraged to buy and use the resource guide and to continue updating it (p. 16)...

"An important consideration which evolves during the implementation of the courses is the camaraderie which develops among the students. This close interaction during long periods of time among students who often come from other rural areas enables them to develop a concentrated, locality-based interface.

"The supervision of internships during the course of the program is another aspect which has certain advantages. These students serve internships with... [consumers] they will be teaching or those who will be in the region in private or public residential facilities. The supervisor provides onsite demonstration and supervision for each... [client] and then seminars are designed to emphasize commonalities and special techniques which will be needed...

"Another segment involved in the implementation is media awareness of the program and the services related to it. Often, the service center receives good public relations from the fact that it is sponsoring such a needed program in the region. The services which teachers will offer, and this enhanced knowledge which they are receiving, serve to emphasize the

5. The fifth part of the document outlines the various ways in which the data can be used. It includes information on how to create reports, how to present the data in a clear and concise manner, and how to use the data to make decisions.

7. The seventh part of the document outlines the various ways in which the data can be shared. It includes information on how to create a data management plan, how to share the data with other researchers, and how to ensure that the data is used for the intended purpose.

9. The ninth part of the document outlines the various ways in which the data can be used to improve the quality of the research. It includes information on how to identify areas for improvement, how to develop new research questions, and how to use the data to make decisions.

role of the Education Service Center in developing better educational programs for children in the region...

"Workshops for... such personnel as diagnosticians and administrators are also results of the program at the service centers. These workshops are at the request of the participants, and are an on-going service to the region after the courses are finished. So far, workshops have been conducted on such topics as multihandicapped assessment, working with parents of visually handicapped children, functional vision assessment, and technological advances for the visually handicapped...

"The additional emphasis on the parents and the extended family, which is an important factor of rural family situations, is another strength of the program...

"... The value of the various courses lies in the innovation approach to teaching... in rural areas. The fact that the teachers already have expertise and knowledge... enables them to advance rapidly in terms of the special expertise needed for teaching... [persons] with visual handicaps...

"Graduates have been evaluated by both parents and supervisors and receive overall ratings in the top 10 percent in categories related to competencies, liaison, contribution to school, etc. (p. 17)."

--Sowell, V., Correa, V., & Wardell, K.T. (1987). Outreach teacher training programs: Rural delivery of services on site. Journal of Visual Impairment and Blindness, 81, 14- 18.

"... One very real practical problem the instructor has to cope with is to have sufficient time to offer a complete mobility program at the client's assimilation rate. This naturally leads to another problem of deciding whether the practitioner should continue moving the client at his assimilation rate and omit giving him mobility experiences in the advanced complex areas, or, accelerate the client beyond his present capacities at the risk of setting him back psychologically (p. 243)...

"... Then there are the subskills of nonvisual locomotion that present problems to the practitioner when the client is not functioning effectively. And it may well be that the client is having difficulties with only one or a combination of subskills. One of the most common of the subskills is linear movement versus rotary movement. This is especially crucial when street-crossing, or in negotiating large paved areas such as gasoline stations, parking lots, etc. In attempting to eliminate rotary movement the practitioner needs to become a diagnostician to determine which of the influential variables are the causes in this specific individual's case. Is it the type of imagery this person is employing, is it due to an excessive lateral shift of the center of gravity as he commences his street-crossing, or is it a conscious or unconscious over-compensation due to a fear of the parallel traffic? Hopefully, the practitioner will identify the causative factors and institute remedial activities which will eliminate the problem. Progression of the individual into more threatening and complex areas without eliminating these problems will tend to ensure that he give up independent mobility because it is too difficult and ineffective.

"Some other subskills of nonvisual locomotion are perception of gradients, perception of lateral tilts, perception of lateral curvature in pathways, and the aftereffects of just-prior movements. I list these subskills to acquaint the reader with the fact that we must be cognizant

of the factors that are influential and need our attention if... blind individuals are to achieve effective, safe, and graceful mobility (pp. 246- 247)..."

--Suterko, S. (1972). "Practical problems of orientation and mobility." Orientation and mobility: A symposium. In Hardy, R. E., & Cull, J. G. (Eds.) Social and Rehabilitation Services for the Blind. Springfield, Illinois: Charles C. Thomas, 226- 264.

"... O&M... has at its core the use of the one-to-one instructor/student ratio. To teach effectively, O&M specialists must put themselves in their students' place as much as possible and interpret environmental cues and potentially dangerous situations, individualize and adapt each lesson, judge when students are emotionally and psychologically ready to learn and perform skills and tasks, and determine when a student has mastered tasks. In addition, they must help instill students' confidence in relying on themselves to complete tasks safely and independently, develop and use specialized media and materials according to the students' individual needs, analyze and select teaching environments that will be most appropriate for individual students, and apply learning theories that are appropriate to the individuals. Furthermore, they have to master highly specialized communication skills, including adapting language appropriate to each student and using communication systems and graphic aids. All these competencies demand the creativity, flexibility, and sensitivity necessary to ply the art of teaching (p. 14).

"[O&M specialists are in charge of the]... development and conduct of 'solo' (independent) lessons and experiences... The typical solo lesson is an unsupervised, unobserved trip to and from a destination. It is employed when the instructor determines that the student is capable of engaging in a test of independent travel. The purpose of the solo lesson is to demonstrate to the student that he or she is sufficiently skilled and confident to master traveling in a particular environment, such as a residential neighborhood or a business district. The instructor must know the student's skills and ability to make judgments and the level of difficulty of the assignment and then make a sound judgment about using the solo lesson; no matter how much care is taken, there is an element of risk in any unsupervised travel. Since the ultimate goal of O&M instruction is safe, independent, and confident travel, the value of a timely and well-planned solo lesson was perceived [by survey respondents] to outweigh the risks because it would confirm students' feelings of confidence (pp. 14- 15).

"... there were two areas about which the consumers felt particularly strong: the importance of a close personal relationship between the O&M specialist and the blind person and the importance of the O&M specialist's concern for safety. The O&M specialist must be able to understand what environmental information is available to the blind person in a dangerous situation and how to use it (pp. 18-19).

"O&M often involves learning to deal with high-risk situations, such as crossing streets and using rapid rail-transit systems. Blind persons rightfully expect to have a trusting relationship with their O&M instructors; they must feel comfortable putting their lives in their instructors' hands. O&M specialists must be able to foster and earn this relationship and use it to be able to gauge expectations under stressful

The first part of the paper discusses the importance of the study of the history of the United States. It is a study of the past which helps us to understand the present and to prepare for the future. The second part of the paper discusses the importance of the study of the history of the world. It is a study of the past which helps us to understand the present and to prepare for the future. The third part of the paper discusses the importance of the study of the history of the United States. It is a study of the past which helps us to understand the present and to prepare for the future. The fourth part of the paper discusses the importance of the study of the history of the world. It is a study of the past which helps us to understand the present and to prepare for the future. The fifth part of the paper discusses the importance of the study of the history of the United States. It is a study of the past which helps us to understand the present and to prepare for the future. The sixth part of the paper discusses the importance of the study of the history of the world. It is a study of the past which helps us to understand the present and to prepare for the future. The seventh part of the paper discusses the importance of the study of the history of the United States. It is a study of the past which helps us to understand the present and to prepare for the future. The eighth part of the paper discusses the importance of the study of the history of the world. It is a study of the past which helps us to understand the present and to prepare for the future. The ninth part of the paper discusses the importance of the study of the history of the United States. It is a study of the past which helps us to understand the present and to prepare for the future. The tenth part of the paper discusses the importance of the study of the history of the world. It is a study of the past which helps us to understand the present and to prepare for the future.

situations. They should be able to answer questions such as these: Is the student intellectually and emotionally ready? How much pressure is too much? Has the student been sufficiently challenged in situations that reflect real-life dangers (p. 19)?

"Of all the demographic findings, one stands out as being particularly significant --the decline in output of O&M specialists from university training programs. From 1960 to 1980, university training programs grew in number and stature. But from 1980 to the present, O&M has experienced the combined pressures of diminished growth and the increased demand for personnel...

"... In an analysis of federal support for O&M training at the university level..., [it was] concluded that the prospect for increased funding is unlikely, at least in the short term. On the basis of this information, it is clear that personnel shortages associated with the shortage of O&M specialists will continue to worsen over time (p. 19).

"Perhaps more than ever before, O&M specialists recognize that flexibility and creativity that do not compromise quality are necessary to meet the growing demand for more services. In 1986, the membership of AER's O&M Division 9 was surveyed regarding the idea of assigning some job duties to a paraprofessional or assistant...

"The vast majority of those responding felt that a role for a mobility assistant could exist (70% were in favor, 23% were not, and 7% did not respond). However, although over two-thirds of the respondents supported the idea, many had reservations and qualifications. More than half of those who supported a role for a mobility assistant wrote detailed comments stressing their concern. Most stated that mobility assistants may be necessary because of a shortage of qualified instructors but that strict limitations should be placed upon the assistant's responsibilities. It should also be noted that 76% of the respondents had never made use of a mobility assistant and that 81% had never trained an assistant, illustrating that the O&M respondents did not take a position out of a strong conviction for mobility assistants but as a reaction to the needs of consumers.

"The position paper of AER's O&M Division 9 on the mobility assistant... openly recognized the need to expand the role of the O&M specialist to include supervising O&M paraprofessionals. The position paper states that no more than two assistants could be assigned to an O&M specialist and that the O&M specialist would conduct all assessments and be responsible for program planning and all direct instruction.

"... The position paper also proposes that to train assistants, a certified O&M specialist must complete an AER-approved trainer's course (pp. 20- 21)...

"Although statistics on attrition from the field are not available, the data suggest that the salaries of O&M specialists have been low, resembling teachers' salaries for the same period. What the Carnegie Forum on Education and the Economy... said about teachers' salaries in the 1970s can also be applied to the salaries of O&M instructors in the 1970s and early 1980s:

"Teacher salaries are extraordinarily compressed when compared to other occupations demanding a college degree. They start

low and remain low. Most teachers approach the top of the scale within 10 to 12 years after entering the work force. Teachers find themselves in their mid-thirties faced with the prospect of no salary growth in real terms when their peers are beginning to enter their prime earning years (p. 21)...

"By 1980, the number of budgeted O&M vacancies in public schools was greater than in any other employment setting... The consequences of the high rate of growth of O&M specialists working in the public schools compared to all other employment sectors is in itself a significant trend (p. 21).

"... Public schools have experienced a great influx of visually impaired students as a consequence of P.L. 94- 142, and specialized personnel, such as O&M instructors, have had to be hired to serve the growing population. It is not surprising, then, that O&M specialists are seeking the certification necessary for employment in public schools... and are working in public schools more than in any other employment sector.

"... O&M specialists in our samples are serving school-age blind children more than any other age group... a large number of O&M specialists are supplementing their O&M certification with certification to teach visually impaired children... O&M specialists in our samples are functioning as itinerant instructors more often than not.

"... The federal government's greater emphasis on serving children in their home communities will continue to strengthen the demand for dual-certified, itinerant O&M specialists.

"The 1986 amendments to the Right to Education for All Handicapped Children Act (P.L. 99- 457) expand the right to services to children over age 3 and are a strong incentive to provide services to children from birth. They can only increase the demand for dual-certified, itinerant O&M specialists who travel to children's homes (p. 22).

"Another explanation for the growth in the number of dual-certified O&M specialist/teachers of visually impaired children who work in public schools is that the salaries and benefits of these professionals are more attractive than are those of most like professionals who work in other settings (private and rehabilitation agencies). In the 1983 sample, O&M specialists who worked in public schools earned more money than did those who worked in state or private agencies and residential schools. Only the relatively few O&M specialists who worked in VA facilities earned more. Considering the recent dramatic rise in teachers' salaries, public schools will no doubt continue to offer competitive salaries for a 10-month work year, making them an attractive option (pp. 22- 23).

"Subpopulation groups, such as visually impaired elderly persons and visually impaired preschool children, are not being served by O&M specialists in large numbers, but it is likely that many more of them will require services in the future. This prediction is based on the following facts:

1. The number of visually impaired elderly people is greater than that of blind people of all other age groups and is expected to grow at a high rate. Yet, this age group receives a small share of all O&M services compared to its size.
2. The visually impaired preschool population, although not a large portion of the blind population, is the fastest-growing age group of all blind persons (projected growth of 19 percent

through 1990). Furthermore, it is the one population group that has recently been targeted by P.L. 99- 457 as a priority for receiving services (p. 23).

"Together, nonwhites (blacks, Asians, and native Americans) make up 14 percent of the U.S. population, and Hispanics make up 5 percent. Despite their relatively small numbers, these minorities tend to cluster geographically, and the prevalence of visual impairment is higher among them than among the white majority... In one demographic study..., one-third of the sample of visually impaired persons were from ethnic minorities...

"A high percentage of the O&M specialists in the 1985 survey identified themselves as white (94 percent), yet they served a significant number of persons of different racial and ethnic backgrounds. These O&M specialists need to be sensitive to cultural differences that may affect attitudes toward blindness and independence.

"If the problems that general education has had recruiting Hispanics and nonwhites are any indication, the field of O&M may not be able to reverse the imbalance easily. Although 10.5 percent of the children in public schools are black or Hispanic, the recruitment of minorities into teaching was only at 8 percent in 1987, a decrease over past years... And since few teachers wish to work in major cities and other high-paying professions are aggressively recruiting minority persons, the outlook is grim, especially considering that the United States is becoming more culturally diverse...

"Overall, it will be necessary to increase efforts to recruit O&M specialists from racial and ethnic minorities, as well as to identify the key cultural variables that are needed to teach O&M to blind persons who belong to these minority groups (p. 24).

"The changing nature of the population of blind persons who will require O&M services beyond the 1990s will place new demands on service providers and will require changes in both the preservice and in-service O&M curricula. More than ever before, instructors in the field will need to hone their skills, knowledge, and teaching strategies and be flexible and creative if they are to serve blind people successfully (p. 26).

"Earlier generations of O&M specialists also had to convince policymakers of the importance of O&M to blind people. The founders of O&M had to justify the need for O&M specialists and continually emphasize the value of O&M services so that the idea spread and high-quality services became widespread. Despite the earlier success, O&M continues to be viewed by some as a related or optional service, not what it really is --an essential service for the education and rehabilitation of blind and visually impaired persons.

"Many policymakers who view O&M as a related service, not a basic need,... do not realize the primary benefits of independent travel, such as freedom, confidence, and self-esteem, and the many secondary benefits as well --exploratory behavior, active decision making, socialization, involvement in career/vocational-related experiences, and so on. These policymakers must be persuaded that independent mobility opens doors to countless other experiences that stimulate growth and development in every aspect of daily living for all blind individuals, regardless of their age, degree of impairment, or additional disabilities (pp. 27- 28).

"It is often argued that, given the choice, blind people would prefer that O&M services be provided by university-trained O&M specialists (p. 28)...

"University-trained O&M specialists will continue to be attracted to public schools. Unless state and private rehabilitation agencies and residential schools increase their salaries and benefits, they will find it more and more difficult to recruit university-trained O&M specialists. Therefore, it is likely to be in these settings that the shortage of personnel will be felt the most... One solution is a joint program between an agency and a university in which the university would train state employees. This approach would provide the agency with O&M personnel and would reduce the university's burden to recruit O&M students (pp. 28- 29).

"Only time will tell if mobility assistants will have a positive impact (p. 29)...

"... O&M has evolved and matured dramatically since 1960. That the demand for O&M professionals has never slackened affirms that what was once an experiment is now an important part of the education and rehabilitation of blind people (p. 29).

"For many years, men outnumbered women in the field of O&M... this ratio has changed. In 1983, women outnumbered men 3 to 2, and 90 percent of all the respondents were under age 40. In the youngest category (30 years or under), women outnumbered men 3 to 1. In the 31- 40 age category, women outnumbered men by less than 5 percent. Of the group of 1985 respondents who entered the work force after 1983, fully 81 percent were women and 19 percent were men.

"... 59 percent of the 1983 sample had five or fewer years of O&M experience. Also, 41 percent of the 1983 sample had been in their then-current position for two or fewer years, and by 1985, 24 percent of the 1983 sample had changed positions. All this lends support to the belief that O&M instructors change positions frequently. Furthermore, the data on age and sex... indicate that this work force is young enough to be highly mobile (p. 51).

"Certification has been available since 1968 but is not mandatory for professional practice. By 1979, 890 O&M specialists were either certified or engaged in the certification process... This figure probably represents fully two-thirds of all O&M specialists who had graduated from a university training program... Professional support of certification has continued to grow; 90 percent of the 1985 sample of O&M specialists indicated that they were either certified by AER or engaged in the AER certification process (p. 53- 54).

"O&M services are most often delivered in one of the following types of program settings: residential rehabilitation centers and schools and itinerant rehabilitation and education programs. Residential rehabilitation centers usually serve adults and are administered by a state agency, a private nonprofit agency, or the VA. Itinerant programs serve both adults and children, are offered by state or private agencies, and are a primary means of delivering services in public school settings. In addition, colleges, state institutions for developmentally delayed and

multiply handicapped persons, hospitals, and specialized clinics employ O&M instructors (p. 56).

"... When the 1980 distribution is compared with estimates from 1970... and 1973... what stands out is the growth in the number of public school settings in which O&M specialists are employed. In 1970, an estimated 21 percent of all O&M positions were in public schools; in 1973, 24 percent; and in 1980, 32 percent. The public schools employed approximately 31 percent of the O&M instructors who participated in the 1983 sample and 34 percent of those in the 1985 sample (p. 57)...

"Statistics on caseloads must be viewed from both annual and daily perspectives to be properly understood. Some O&M specialists see clients for lengthy sessions over extended periods, while others see clients briefly for only a few sessions...

"Since O&M is taught on a one-to-one basis and 6 hours a day of teaching is the prescribed maximum of the National Accreditation Council for Agencies Serving the Blind and Visually Handicapped... it is not surprising that the mean daily caseload is under 6 persons and the mean annual caseload is about 30 individuals (p. 58).

"... Because so many O&M specialists are itinerant teachers, it is interesting to note the time they spend in transit. The mean monthly mileage for the 1985 sample of itinerant teachers was 683 miles (approximately 10 percent of the sample traveled more than 1,500 miles per month, and one individual from Alaska reported traveling 7,500 miles per month). The mean number of monthly hours spent in transit was 32, and almost 25 percent reported spending more than 40 hours (1 full workweek) per month in travel (p. 59).

"... the mean percentage of time spent in each of nine activities in which O&M instructors in the 1985 sample were likely to be engaged [was also studied]. Although most of these activities are not especially time consuming, they [communication, record keeping, professional development, supervision, program development, advocacy, in-service, and other, as well as teaching O&M] add up to approximately 23 percent of the annual work time (plus roughly another 25 percent for travel), which leaves only a little more than 50 percent of the time for direct teaching. Taken together, the time available for teaching and the one-to-one instructional requirement limit the alternatives for reducing the cost per instructional unit of O&M services (pp. 59- 60).

"Of all persons served in the 1985 sample, 30 percent were totally blind, 59 percent were legally blind but had vision better than light perception, and 11 percent were not legally blind (p. 62).

"... The 1983 sample reported that about 51 percent of their clients during the previous 12 months were multiply handicapped... Residential schools stand out in the number of multiply handicapped visually impaired persons served by O&M respondents; 67 percent of the persons served by O&M specialists in residential schools were multiply handicapped, followed by 62 percent in VA facilities. The respondents in the other settings reported they were serving a large percentage of multiply handicapped persons, but in no case did the proportion rise above 50 percent (pp. 62- 63).

"Within today's legally blind population, the over-65 segment makes up 54 percent and the under-5 segment makes up less than 2 percent... These two groups are expected to experience the most growth through 1990; the over-65 group is predicted to grow by approximately 17 percent and the under-5 group is predicted to grow by approximately 19 percent...

"Because of the relative size of the older visually impaired population, one might expect that a larger proportion of the persons served by O&M specialists are elderly. However... younger Americans, especially school-aged visually impaired children, received services from the O&M instructors in the 1983 sample more than did any other group (p. 64).

"One possibility is that a large number of aged blind persons are outside the mainstream of blindness services and are never referred for specialized services. Yet, rehabilitation teachers serve a large number of aged persons... No doubt, the lack of Medicare reimbursement for O&M services curtails the provision of these services to aged persons.

"... O&M instructors are, for the most part, young, female, and Caucasian. However, their clients are of many races and nationalities (p. 65).

--Uslan, M. M., Hill, E. W., & Peck, A. F. (1989). The Profession of Orientation and Mobility in the 1980s: The AFB Competency Study. New York: American Foundation for the Blind.

"... A low vision program should be included to deal with those blind individuals who retain useful vision, but who have not been provided with the opportunity to maximize their use of this remaining vision. The time has come when mobility and the other areas of blind rehabilitation 'can no longer treat these people as if they were totally without sight and educate them as such. We should begin to make use of their remaining vision and provide for this type of individual. The low vision program is the first step in this direction.'

A good low vision training program should begin 'with a low vision examination, recommendations as to whether low vision aids will benefit the client, and a functional vision evaluation...' All become the responsibility of the orientation and mobility personnel who are adding low vision services to their mobility program (p. 122).

"... An important consideration to be avoided is related to the previous discussion of the establishment of a low vision section in the mobility program. Unfortunately, many of the better programs and the better instructors are still advocating the blanket use of the blindfold when working with low vision clients in mobility. 'This is partially true because a totally blind person is easier to train than a partially sighted person. This idea or philosophy is a reflection on the type of training that instructors are receiving today.'

"If possible, instructors should avoid this stumbling block, as they will find that once the blindfold has been removed the client will go right on using his remaining vision. No way to prevent the partially sighted client from using his vision when he is alone and not wearing the blindfold has been developed to date. Instructors are also beginning to discover that this type of training does not necessarily give the client the 'big plus' when the blindfold is removed, as was once believed.

1. The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present and for the development of a sound policy for the future. The author then proceeds to discuss the various factors which have shaped the history of the United States, including the influence of the American people, the government, and the world.

2. The second part of the paper discusses the role of the American people in the development of the United States. It is argued that the American people have played a central role in the history of the United States, and that their actions have shaped the course of the nation's development. The author then discusses the various factors which have influenced the American people, including the influence of the government, the economy, and the culture.

3. The third part of the paper discusses the role of the government in the development of the United States. It is argued that the government has played a central role in the history of the United States, and that its actions have shaped the course of the nation's development. The author then discusses the various factors which have influenced the government, including the influence of the American people, the economy, and the world.

4. The fourth part of the paper discusses the role of the world in the development of the United States. It is argued that the world has played a central role in the history of the United States, and that its actions have shaped the course of the nation's development. The author then discusses the various factors which have influenced the world, including the influence of the American people, the government, and the economy.

Training the client in the use of his remaining vision concurrently with training him in the techniques of mobility has proven to be the best manner to enhance his travel ability (p. 124)."

--Weesies, M. J., and Head, D. N. In Head, D. N. (1972), Procedures for the activation of an orientation and mobility program. Blindness, 117- 128.

"Psychological and social variables play an important role in understanding the cognitive and physical behaviors that result in orientation and mobility. A common sense understanding of these variables seems quite prevalent among mobility specialists (p. 225)...

"The process of learning to move independently through the environment is integral to every phase of personal and social development. The personality of the individual emerges, along with the ability to move independently as the one very much affects the other.

"... immobility can create psychosocial problems. It may lead to 'feelings of hopelessness, hostility, and dread of the outside world' (Wilson, 1967, p. 287). It can also create social problems since the person must be more dependent on others, which has the effect of increasing the sense of burden that others feel and further diminishing their expectations of the visually impaired person.

"Studies of the adjustment of visually impaired persons done by Bauman and Yoder (1966) and Graham (1965) have indicated that success in mobility is associated with good adjustment to visual disability. It is impossible to say which comes first, whether good adjustment to a visual loss results in good mobility or whether the reverse is true. An interactive effect is likely to be closer to the truth... The interaction between successful orientation and mobility and the self-concept, feelings of independence, motivation for rehabilitation, the attitude of the family, and the ability to cope with people on the street is complex and reciprocal. A positive self-concept can be both a cause and an effect of success in mobility. On the other hand, a negative self-concept can result from lack of independent mobility or can make progress toward independent functioning more difficult. Similarly, a sense of independence can contribute greatly to a person's success in learning to travel or can result from success in a particular mobility task. Excessive dependency, however, can hinder improvement in mobility or can be a byproduct of the person's inability to move successfully. Such is the nature of psychosocial variables (p. 226).

"Two psychosocial variables frequently associated with orientation and mobility are fear and anxiety. Uninitiated laypersons are particularly quick to project these attributes onto visually impaired persons who attempt to move independently (p. 233)...

"Fear and anxiety first enter the mobility situation as a deterrent to the visually impaired person entering the training and beginning to travel. The person's motivation to travel must be strong enough to enable him to overcome these avoidance tendencies. The individualized nature of mobility instruction may provide a sufficient guarantee of safety to encourage some fearful clients to begin. For others, the anxiety may be overcome by certain other motivational influences... such as the drive to master a particular skill (p. 234).

"Once instruction has begun, fear and anxiety affect its success in other ways. Reactions to perceived threat can contribute to success in a positive way. There are certain real dangers for a person who attempts to travel without vision. The world has been constructed for people who can see. Obstacles, curbs, stairways, and moving vehicles present real threats to pedestrians, both blind and sighted. A normal fear of these

4. The fourth part of the document discusses the challenges of data management in a rapidly changing environment. It notes that as the volume of data increases, it becomes more difficult to keep track of everything. The document suggests that organizations should adopt a proactive approach to data management, regularly reviewing and updating their systems to ensure they are capable of handling the growing volume of information. It also emphasizes the importance of training staff to use the systems effectively and to maintain the highest standards of accuracy and security.

5. The fifth part of the document provides a summary of the key points discussed and offers some final thoughts on the importance of data management. It reiterates that accurate and reliable data is the foundation of any successful business operation. The document concludes by encouraging organizations to continue to invest in their data management systems and to stay up-to-date with the latest trends and technologies in the field.

dangers if followed by appropriate cautions can result in safe movement. Fear can also trigger the release of adrenalin and help the individual to deal with real threats.

"... minimal amounts of anxiety may be important in the learning situation and may serve as a motivator.

"Fear and anxiety occupy the attention of the mobility specialist to whatever extent they prevent learning in the visually impaired person (p. 235).

"It is not unusual... that a visually impaired person experiences anxiety. Since severe visual impairment is a low incidence disability, there are not many examples of independent functioning without vision available to the average person. The person who experiences visual loss has had very few examples of other persons within his own experience who have coped with this disability and continued to function normally. Even if the person has some awareness of the possibility of continued functioning, he has not usually been close enough to a visually impaired person to understand how that functioning is possible. This lack of knowledge comes at a time when the person is undergoing serious changes in his self-concept as a result of the visual loss and the different treatment he is beginning to receive from those around him. The reconstruction of his self-concept comes to be associated with his ability to learn how to function in his daily life, which has now become a new psychological situation both because it is a new experience and because he lacks the tools for coping with it. The possibility of not succeeding in this reorganization of the self overwhelms the person and leads to anxiety. This sequence of events is even more likely for those persons who are high in trait anxiety...

"The congenitally visually impaired person's situation is different but similar. While they do not experience a reorganization of the self as do those who are adventitiously impaired, they do have a similar lack of awareness about how functioning will be possible. Much of their questioning in this regard is stimulated by the concern, lack of information, and the fears of their parents and those around them. While they can readily identify with the general goals of the culture as expressed in the value of employment and independent functioning, they do not have confidence of understanding how they will accomplish these tasks. This threat to the development and functioning of the self is not usually as clearly perceived as suggested here, but is experienced as a more diffuse threat and nervousness, which we call anxiety (p. 236).

"Schultz (1972) has stressed the importance of the emotional interaction between the mobility specialist and the client in the successful reduction of anxiety throughout mobility training. In a similar way, Fluharty, et al. (1976) have suggested that the mobility specialist communicate to the client that mistakes during training are expected and inevitable and that they will not result in rejection.

"The developmental nature of the lesson plan sequence is the mobility specialist's other tool for combatting the effects of anxiety. The sequence attempts to expose students to danger and anxiety-provoking situations only after he has had the opportunity to develop the skills to cope with that situation. This represents a direct effort to combat the new psychological situation by defining and training the client in the skills that are necessary for dealing with the challenge (p. 237).

"It is also significant that mobility instruction takes place in real environments rather than simulated or artificial areas. In real environments the client will experience the actual fears and anxieties. It is only by experiencing these anxieties that the feeling of success that comes with the use of the proper techniques will have the effect of reducing the anxiety.

"The unexpected nature of events that occur in real environments is also essential for the person to overcome his anxieties, especially those related to interacting with others. As the lessons progress, the mobility specialist retreats farther and farther from the client, increasing the chances that others will approach him and offer help or otherwise interact. As the client gets experience by dealing with people as well as evaluative feedback from the specialist about these interactions, some of these anxieties can be overcome.

"While the ability to deal with the unexpected is a function of the lesson plans in real environments, the mobility specialist has an overriding responsibility to try to systematically expose the client to all possible contingencies that might occur while traveling independently... While it is impossible to present all possible occurrences, the client should be exposed to a sufficiently wide variety of situations so that he will less likely experience anxiety as a result of not having tools to cope with new situations that come up.

"... the best way to help a client overcome the fear and anxiety related to traveling with reduced vision is by providing structured learning experiences which systematically expose the client to the real and imagined threatening situations in such a way that the client can develop techniques for coping with and reducing these threats (pp. 237-238).

"Through the developmental sequence of the lesson plans, the mobility specialist can manipulate the amount of independent functioning required of the client and thus reinforce that dependence on self... The specialist's skill must be to use his attention to reward independent effort and not to reinforce dependence. This requires that the specialist extend warm and accepting support while demanding more and more independence. The mobility specialist also uses his physical proximity to the client to assist in this effort. As the specialist withdraws farther and farther from the client, he communicates this to him and the client realizes that he must depend more and more on his own abilities. It is important that the client understand clearly the conditions under which the mobility specialist will re-enter the situation and assist, whether such re-entry is for the sake of assuring the client's safety, to control the level of difficulty of the situations that the client encounters, or for the sake of a more efficient and appropriate learning experience for that particular lesson. If the client does not understand why the instructor has intervened in a lesson that he was expecting to handle independently, he may perceive this as a contradictory message that will retard the growth toward independence.

"The relationship described above is not without its hazards. There is a good possibility that members of the client's family will not understand this need to make demands on the client or that passersby will misinterpret the specialist's refusal to step into a situation when a client is disoriented... The close relationship that is necessary for the client to be able to put his trust in the mobility specialist could easily develop into one of excessive dependency. The specialist must be careful

not to allow it to develop to the point where he becomes overprotective of his clients and does not have reasonable expectations of them. In addition, some clients may have difficulty severing strong attachments.

"... The average person on the street does not know how best to give directions to a visually impaired person. Thus, the person with the visual loss must take charge of the interchange and ask the right kind of questions that will bring the kind of information that he needs to achieve his objective. This is another skill that the mobility specialist must address in his lesson plans. Feedback from the specialist on how the client does on this task can help him learn how to manipulate interaction with sighted helpers so that the situation works to his advantage. The visually impaired person should also be helped to realize that the judicious use of help is not a threat to his independence. The truly independent person does not feel that he has to constantly prove himself to others. Therefore, reliance on others when necessary or chosen is quite acceptable.

"... It is difficult, if not impossible, to separate cause and effect when considering the interaction between independence/dependence and mobility. On one hand, immobility certainly leads to increased dependence, while success in learning to move through the environment diminishes the need to depend on others. On the other hand, a tendency to prefer dependence would discourage a person from engaging in mobility training, while a lack of success at early attempts to travel would seem to result in an increased desire to be dependent. The only way out of the circle seems to be through sequenced training in the context of an understanding and accepting relationship (pp. 241- 242).

"... a person's sense of competence or self-esteem can be affected by the person's perception of the effectiveness of his own actions, his perceived freedom to select from a number of possible actions, his sense of similarity with others, and the communications he receives from others about his own competence. Considering these factors in relation to the task of independent movement, it is easy to see how the immobile person or the person who must depend on others can end up with a poor self-concept (p. 245).

"To the extent that a person has a repertoire of actions to choose from in attaining goals, he is also likely to develop more effective and efficient actions and thus greater self-esteem. In traveling, the visually impaired person who has the options of moving independently or going with a guide has more opportunity to respond to each day's challenges in a variety of ways that contribute to his sense of competence. If he is limited to responding to opportunities only when he has a guide available, his choices are limited.

"The interaction between the self-concept and independent travel with reduced vision is complex and reciprocal. If the person has developed a negative self-concept as a result of some of the natural reactions associated with visual loss in our culture, this attitude may reduce the likelihood that the person will aspire to the achievement of success in independent travel. Either his poor self-concept prevents him from beginning the training, or his self-esteem will not sustain him through the initial frustrations and the anticipated fears. This lack of success will further reinforce his negative self-concept or result in some other defense mechanism that protects him from a negative self-evaluation.

"On the contrary, if the individual can be helped to experience some

success in the tasks of independent movement and can be rewarded for this success in the context of an accepting relationship with the mobility specialist, then perhaps the visually impaired person can begin to feel more positive about himself and continue to improve in these feelings throughout the training sequence (p. 246).

"... it is true that the fear and anxieties of family members can affect the experience of the visually impaired person during and after mobility training, [and] this variable must be considered and dealt with by persons responsible for delivering mobility services. In some instances, this difficulty can be lessened through information provided to the family. It is helpful for most families to observe a number of mobility lessons at various stages in the training so that they can have a better understanding of what skills are being developed and the types of solutions that are available for various problems. Observing actual lessons also provides family members with an opportunity to question the mobility specialist and to express some of their concerns. This opportunity should be available, both in the presence of the visually impaired person and privately, since some people may be reluctant to express their fears for the visually impaired family member to hear (p. 249).

"The concepts discussed earlier, related to the importance of a developmental sequence of lesson plans and the relationship between the instructor and the client for dealing with the psychosocial variables, also relate to the interactions with family members, particularly when they are not enthusiastic about the person becoming more independent. The mobility specialist should be aware of this possibility and try to pull the family members into the planning and activity of the mobility training as much as the setting allows (p. 250).

"Mobility training deliberately exposes the client to situations in which he will be approached by and have to interact with members of the public representing a wide range of attitudes toward visual impairment. The mobility specialist will be with the client during most of these encounters and will be in a position to observe how the client handles the interaction and to give some feedback and advice on how to handle the situation differently when necessary. The frustrations associated with unpleasant examples of these encounters may be very discouraging for the visually impaired person, and may result in his experiencing more acutely this type of excluding overlapping roles discussed above. This, in turn, may lead to his traveling less and less independently or terminating his lessons if still in training. Because of this, the mobility specialist must be sensitive to how the client is coping with this aspect of the mobility training, and must be ready to modify the lesson plans if necessary or to arrange the sequence of lessons along a gradient of involvement with other persons in order to assist clients with the difficulties associated with such interactions (p. 255).

"... the person who enters mobility training may not have a high degree of problem-solving ability or may not have confidence in what ability he does have. This lack of ability or lack of confidence can cause deficiencies in the person's self-esteem, can create additional anxiety, can prevent emergence of independent functioning, and may be the basis for family members distrusting this person's potential for

responsibility for himself in travel situations. For these reasons as well as because this ability is necessary in actual travel situations, mobility instruction must deal directly and systematically with the skill of problem-solving and decision-making.

"From the earliest lessons in the sequence, the mobility student is exposed to problems of orientation and is asked to solve them. Initially they are simple and basic problems related to remaining oriented while traveling with a sighted guide, but as training progresses, they become more complex. Once the student begins to travel by himself he is required to make more decisions on his own and to cope with the consequences of these decisions, including the new problems that wrong decisions bring.

"The mobility specialist attempts to control the complexity of the problems that the client must deal with through the structuring of the lesson plans and through his own decisions about when to step into a situation and provide additional assistance. The instructor has wide discretion relative to how complex the problems of the client become. He must decide when to terminate a lesson and when to let it continue. Through the close working relationship that the mobility specialist tries to develop with the client, he is able to evaluate how much frustration a client can tolerate. This relates to the earlier discussion of the effect of level of aspiration on the the experience of success. It is unlikely that the client will develop more confidence in his ability to solve problems if the problems presented do not represent a reasonable challenge. The specialist must monitor the lessons closely to be certain that the challenges do not extend beyond the client's current ability leading to further frustration and a possible set-back in his progress.

"The drop-off lesson... is an important technique available to the mobility specialist in helping the client develop problem-solving abilities... The mobility specialist can help the client become aware of and develop a variety of strategies and solutions from which to choose in problem situations.

"Success in the problem-solving activities that occur throughout the lesson plan sequence as well as in the drop-off lessons can have an important impact on the person's confidence in his own abilities. This success can also have an important impact on the person's self-concept, his sense of independence, and his motivation to continue in training and to transfer his skills to new areas (pp. 257- 258).

"Related to the concept of the relationship between the mobility specialist and the client are the difficulties that may be associated with the 'weaning process,' an important part of mobility instruction for many clients. When this is done improperly, or when it is not well-timed, a number of difficulties can arise. The person may experience an increase in anxiety rather than being able to handle the next stage. The client may act as if the instructor is always close, by attempting to talk with him during the lesson to verify certain information. The person may also give evidence of being slow to recognize problems and to implement any problem-solving strategies...

"The reaction of the instructor is particularly poignant in those situations in which the visually impaired person is insulted or treated poorly by a member of the public. The instructor's tendency may be to step in and defend the client. It is important to consider, however, the message that such a defense might convey to the client himself. For some clients, such an event might communicate that the client is indeed a helpless person who must be defended by others. As discussed..., it is



not possible to change very effectively the attitudes and behaviors of the general public. There will continue to be people in the community who will have negative, stereotypical reactions to visually impaired persons. The visually impaired person must learn how to cope with this type of situation on his own, since his defender the mobility specialist, will not always be present. Perhaps role playing and rehearsing effective responses in such situations does more good than the interference of the specialist (p. 259).

"... the mobility specialist should be aware of all of the variables that might possibly influence a person's experience as he attempts to understand the experience and functioning of each individual as a unique entity.

"... To the extent... that the self-concept, if deficient, can prevent successful orientation and mobility, it is also true that success in orientation and mobility can have a positive effect on the self-concept (p. 260)."

--Welsh, R. L. (1980). Psychosocial dimensions. In Welsh, R. L., & Blasch, B. B. (Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 225- 264).

"... of 332 graduates (the total as of 1970), 87 percent were still working with visually handicapped persons, 83 percent were still working in the field of orientation and mobility, and 75 percent were still involved in offering direct instruction. Of the 13 percent not working with visually impaired persons, only five percent were working in another field. Most of the remaining eight percent were women who had to leave the field temporarily because of family responsibilities. Compared to other professions, this was an extremely high percentage of people staying with the profession and a record others aspire to emulate (p. 434).

"One of the main interests of the researchers, however, was to determine the separation between the actual need for mobility specialists, defined by open positions that have currently not been filled, and the theoretical need for mobility specialists, defined by the administrators' perceptions as to how many mobility specialists they could use if all additional funds were available. Fifty actual positions were discovered by the survey; however, the respondents felt that if funds were available, there is a need for the services of five mobility specialists for every actual position that is available (p. 441).

"In summary, it appears that there still are positions available for orientation and mobility specialists and that the current university programs must continue to operate in order to meet the present and future needs. If we ever begin to provide mobility training to all of those persons who need it, the demand for mobility specialists will be five times greater than the current output.

"The preference for university-trained mobility specialists is strong and this preference appears to be growing (p. 443)..."

--Welsh, R. L., & Blasch, B. B. (1974). Manpower needs in orientation and mobility. Journal of Visual Impairment and Blindness, 68, 433-443.

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"... During the 60's and 70's when social consciousness was on the rise, interest was high in entering the professions serving children and adults who are blind. Today, emphasis has switched to professions that reward the employee financially and convey the highest prestige. Unfortunately, in today's climate the professions serving individuals with impaired vision meet neither of these criteria (p. 3).

"... individuals enter our field most often as a result of contact with a professional within the field or with a blind person (p. 5)...

"... The greatest concentration of those entering the field appear to be in the Northeast and Midwest. The geographic locations where people would like to reside are evenly divided with the Northeast having a slight edge (p. 6)...

"Data from... various surveys clearly suggest that the most effective techniques [for recruiting] incorporate direct personal contact (p. 10)...

"Data... on retention in various human service professions reveal several points that are relevant to the field of blindness. From surveys of job-related satisfaction of rehabilitation counselors and mental health workers, the authors concluded that, contrary to the general belief that professional level occupations produce greater job satisfaction than blue-collar trades, 'the helping professional experiences the same feelings of alienation, frustration, attenuated self worth, and apathy as do his or her nonprofessional counterparts'... 'in the traditional client-centered orientation, shared by most health and social service professions, the focus is almost exclusively on the client, and not enough attention is given to the stresses encountered by the professional'. The authors further stated that in social work two categories of stress were delineated: (1) internal characteristics (intrinsic properties of the work conditions, such as variety, autonomy, and the individual's sense of meaningfulness and achievement), and (2) external work characteristics, (work relations, work sharing, support from co-workers, the availability of sanctioned time-out periods, and feedback from supervisors and colleagues). While work characteristics in both categories are important, the external characteristics which involve the social aspects of work are more important... 'poor supervision and lack of encouragement and support from the agency and administration were two of the most frequently mentioned reasons for departure from a job and for dissatisfaction with the work situation'... the most critical element in the morale of staff seemed to be the establishment of good working relations with colleagues, appropriate sized caseloads, and the ability to influence administrative decisions affecting their work (p. 11).

"... Agency and school administrators, university faculty, and visually impaired consumers are faced with concerns that threaten adequate provision of services. All affected groups must realize that the problem will not go away unless a concerted effort is made to find new solutions to our problems. The time has come for all to work together to alleviate the personnel shortages...

"Aggressive recruitment activities must also be undertaken. Agencies and schools that are having difficulty locating qualified practitioners may want to recruit individuals to enter the university programs. In recent months various agencies have taken the initiative of offering

scholarships to individuals who would be willing to enter such training. Private and state agencies have recruited these individuals with the promise that they will work for the agency for a minimum of two years. Often these agencies can establish a working relationship with one of the universities and allow for shared financial assistance. The university will often offer the student a stipend and a percentage of the tuition, leaving the agency to supplement the remainder of the tuition expenses. Some agencies have been offering present employees these opportunities while others have been recruiting new individuals through the newspapers. Still others have offered this arrangement to individuals who have been volunteers at the agency or school (p. 13).

"... financial assistance for students has not kept pace with the cost of living. The incentive of tuition assistance that helped attract students in the 60's is no longer as strong as it once was. In this time of personnel shortages it is therefore necessary to advocate for increased subsidies so that students can afford to attend schools. It is also necessary to advocate for fuller funding of existing university programs and for establishment of new programs (p. 14)..."

--Wiener, B., & Bussen, P. (1987). Shortages in personnel serving children and adults who are blind: A recruitment dilemma. Yearbook of the Association for Education and Rehabilitation of the Blind, 5, 116.

"Thus face-to-face contact seems to be the crucial element in attracting individuals into our professions, and it is here where we need your help (p. 2)."

--Wiener, W. (1987). A call to action--we need your help! AER Report, 4, 3, 1- 2.

"Through its Professional Issues Committee, of which the authors are chairperson and members, the Orientation and Mobility Division (IX) of the Association for Education and Rehabilitation of the Blind and Visually Impaired (AER) has developed a position paper calling for the training and certification of orientation and mobility assistants. The role of the mobility assistant is primarily one of monitoring specified skills and must be carried out under the direct supervision of an AER-certified orientation and mobility specialist (p. 69)..."

"Independent mobility allows visually impaired persons to participate fully in educational and recreational programs, maintain employment outside the home, and meet social needs and obligations. O&M instruction can provide people who are visually impaired with the skills necessary to enter any environment, familiar or unfamiliar, and to move safely, efficiently, gracefully, and independently within that environment (pp. 69- 70)..."

"O&M instruction focuses on many areas of development and rehabilitation in order to prepare visually impaired persons for independent travel. The O&M specialist must be well versed in the specific techniques of O&M, including use of the long cane, dog guides, and other travel systems as well as in environmental analysis and modification. The O&M specialist must also be knowledgeable in such areas

as psychosocial issues, child development, kinesiology, concept development, sensory awareness and development, the nature and impact of additional handicaps, research, low vision, and the educational and administrative aspects of O&M services.

"The following key elements form the basis of orientation and mobility: (a) the need for a trusting relationship between student and service provider; (b) thorough assessment and evaluation of each student's abilities and needs; (c) analysis and selection of instructional environments; (d) individualized programming for each student; (e) appropriate sequencing of instruction; and (f) instruction in appropriate and effective decision making (p. 70)..."

--Wiener, W. R., Deaver, K., DiCorpo, D., Hayes, J., Hill, E., Manzer, D., Newcomer, J., Pogrund, R., Rosen, S., & Uslan, M. (1990). The orientation and mobility assistant. RE:view, 22, 69- 78.

"Initially one blind person taught another those skills that had proved effective in traveling from one place to another. When large numbers of blinded soldiers returned from World War II, more effective orientation and mobility (O&M) training methods had to be found. From the Valley Forge program and its successor at Hines Veterans Administration Hospital, it was learned that an intensive O&M program, emphasizing blindfold instruction and psychosocial components of the O&M training, was necessary for producing effective practitioners... In the late 1940s it was found that observers of the training program could not replicate the program's positive outcomes with short-term training. Many representatives of agencies who visited Hines tried, unsuccessfully, to carry away seeds from which to develop similar programs. According to Malamazian (1970), [p. 72], 'In most cases, all we imparted was a hearty respect for street crossings, a frustrating respect for ourselves and a desire on the part of the would-be instructor either to have a lot more training or have nothing to do with it himself because he thought there was too much risk (p. 56)...'"

"By 1953 the dangers of untrained individuals setting themselves up as O&M instructors were recognized... In 1959 a national conference of the American Foundation for the Blind (AFB) established requirements for O&M instructors, the length of the training, and the necessary curriculum... This conference determined that training must be on the graduate level, include one year of academic study, and require the students to have 20/20 vision (pp. 56- 57)..."

"The early graduates of the university programs demonstrated the effectiveness of the techniques and procedures of independent travel. Gradually agencies began hiring these graduates and developing comprehensive O&M training programs. It was first believed that 100 instructors would meet the training needs of the visually impaired population; however, the discovery that O&M could be broadly applied to children as well as adults created a need for many more O&M instructors (p. 57)..."

"There are two sound justifications for the development of mobility assistants. First, the growing demand for mobility specialists has outpaced the ability of the profession to graduate enough instructors to meet the needs of people with visual disabilities. The development of

mobility assistants would allow individuals with lesser training to monitor routine tasks and free the trained O&M instructors to serve more individuals. The second justification is to improve the services available to those who are visually impaired. To master the skills necessary for more advanced training, students often must repeat fundamental skills. A mobility assistant could provide an opportunity for the practice that would ultimately result in the student's functioning at a higher level (p. 58)...

"Analysis of the membership survey data made clear that the majority of [O&M practitioner] respondents believed there should be a role for a mobility assistant... Seventy percent of the respondents recommended a role for an assistant, whereas 23% saw no role for such a person... Strong consensus emerged for using assistants only for monitoring specific skills that first had been taught by the fully trained O&M specialist...

"Concerns were expressed during the debate that suitable safeguards be put in place to ensure that the mobility assistants be properly trained and supervised and would not overstep their responsibilities and dilute the quality of services (p. 59)..."

--Wiener, W. R., & Uslan, M. (1990). Mobility assistants: a perspective on new service providers. RE:view, 22, 56- 68.

"Bledsoe... described the Army and Veterans Administration Rehabilitation Programs in which the techniques to systematically teach blinded veterans to travel were first developed. As articles describing these programs began to appear, and veterans from these programs began to disperse to their home communities around the country, agencies and schools for the blind became very interested in what was being taught at Hines Veterans Administration Hospital. The Hines staff began to receive requests to train people to teach mobility and to provide literature and materials dealing with orientation and mobility techniques (Malamazian, 1970).

"During the 1950s, the Hines staff tried to respond to these requests and to share as much information as they could. According to Malamazian (1970), visitors to Hines came for varying amounts of time ranging from several days to a few weeks to observe the program and learn how to teach the techniques that were developed. In addition, Hines staff members sponsored by agencies for the blind gave short-term courses for groups of workers for the blind around the country. The effect this sharing of newly developed knowledge had was expressed by Malamazian thus, 'In most cases, all we imparted was a hearty respect for street crossings, a frustrating respect for ourselves and a desire on the part of the would-be instructor either to have a lot more training or have nothing to do with it himself because he thought there was too much risk' (Malamazian, 1970, p. 72) (pp. 625- 626).

"In June, 1958 the Office of Vocational Rehabilitation identified the training of mobility specialists as its second highest priority in the area of training rehabilitation personnel... To implement this, the American Foundation for the Blind (AFB) was funded for a national conference on orientation and mobility, held in 1959, to establish criteria for the basic selection of mobility personnel, to develop a curriculum, and to recommend length of training and appropriate sponsorship.

"This conference was a significant step in the establishment of orientation and mobility as a profession. A major decision was to establish the minimum training period for mobility specialists as one year of graduate study. The greatest support for this provision came from mobility instructors attending the meeting, especially those with the longest experience, who were unwilling to support short-term training because their own experiences had proven it to be ineffective. They believed that, 'Necessary emotional conditioning was so intricate a process, the ingraining of principles through time-consuming laboratory experience so necessary, that the needs of the situation could not be met in a compressed teaching program of two weeks, two months, or even four months' (American Foundation for the Blind, 1960).

"This conference also established the principle that mobility specialists should be sighted rather than blind. Although this point went against the thinking of many in the field, it was felt necessary to allow an instructor to move away and still provide for the client's safety. This further reinforced the need for extended training in order that the instructors could habitually think about how to manage the problems of living without sight. Other standards related to the academic prerequisites of students and personnel and physical characteristics that were thought necessary...

"... The conference also recommended that five areas of study be included in the training program curricula. These were:

1. Physical orientation and mobility, taught through learning the essential skills and techniques of orientation and mobility under a blindfold, by observations of personnel in a variety of settings such as schools, agencies, and hospitals, and by supervised teaching of blind persons. In this area information about the special needs of different clients, for example, totally blind, partially seeing, the newly blinded person, the experienced blind person needing remedial work, congenitally blind children, those with multiple handicaps, and the aging would also be included;
2. Dynamics of human behavior related to blindness, focusing on the need to modify certain actions in the presence of blind people, for example the instructor's own feelings about blindness and ways of relating to blind people, as well as skills in observation and description;
3. The functions of the human body as they relate to blindness, involving the study of anatomy and physiology, hygiene, kinesiology, orthopedics, and remedial exercises;
4. Sensorium, including the study of the senses, their use and coordination, and an understanding of advances in knowledge in this area;
5. Cultural and psychological implications of blindness, closely related to the second topic and dealing with attitudes toward blindness and changing attitudes, as well as ideal methods of dealing with the problems of blindness and the successes and failures of methods used. This area was also intended to provide an opportunity for mobility specialists to learn about the other disciplines related to blindness. (American Foundation for the Blind, 1960) (p. 627).

"When Blasch, Suterko, and Blaha left Hines for Western Michigan University, one concern was that the university training programs

4. The fourth part of the document discusses the company's commitment to social responsibility. It states that the company will continue to support various community programs and initiatives, and that it will strive to be a good corporate citizen in all respects.

5. The fifth part of the document discusses the company's commitment to employee development. It states that the company will continue to invest in its employees, providing them with training and development opportunities to help them grow and advance in their careers.

6. The sixth part of the document discusses the company's commitment to innovation. It states that the company will continue to invest in research and development, and that it will strive to develop new products and services that meet the needs of its customers.

7. The seventh part of the document discusses the company's commitment to transparency. It states that the company will continue to provide regular updates on its financial performance and on its various initiatives, and that it will strive to be open and honest in all of its communications.

8. The eighth part of the document discusses the company's commitment to risk management. It states that the company will continue to identify and assess its risks, and that it will implement measures to mitigate those risks to the greatest extent possible.

9. The ninth part of the document discusses the company's commitment to compliance. It states that the company will continue to ensure that it is in full compliance with all applicable laws and regulations, and that it will take appropriate action to address any violations.

10. The tenth part of the document discusses the company's commitment to excellence. It states that the company will continue to strive for the highest quality in all of its products and services, and that it will be committed to continuous improvement in all aspects of its operations.

11. The eleventh part of the document discusses the company's commitment to integrity. It states that the company will continue to uphold the highest standards of ethical behavior, and that it will be committed to doing what is right in all circumstances.

12. The twelfth part of the document discusses the company's commitment to partnership. It states that the company will continue to seek out and develop strategic partnerships with other organizations, and that it will strive to create value for all of its partners.

13. The thirteenth part of the document discusses the company's commitment to leadership. It states that the company will continue to be a leader in its industry, and that it will strive to set the standard for excellence in all aspects of its operations.

would be short-lived. The original grants for the training programs were for five years, but Malamazian (1970) and others felt that the two programs at Western Michigan and Boston College would meet the nation's need for mobility specialists in three to five years. By 1966, recognition of the value of trained mobility specialists by agencies and schools led to such a great demand that another conference sponsored by the Vocational Rehabilitation Administration and the School of Rehabilitation Counseling, Richmond Professional Institute, was held in Washington, D. C. Forty people representing the Vocational Rehabilitation Administration, the Office of Education, the Veterans Administration, private and state agencies, residential schools, and others were called the Ad Hoc Committee Concerned with Mobility Instruction for the Blind. Spurred on by the perceived need to come up with the greatest number of well-trained mobility specialists in the shortest time, the Committee reviewed the existing training programs and explored other possibilities of increasing the number of mobility specialists. While some questions were raised concerning whether or not mobility specialists needed to be trained at the graduate level, a general respect for the existing programs was expressed. In addition, it was concluded that even if programs were developed on an undergraduate level, mobility instructors could not be mass produced in less time. As a matter of fact it was reported that summer sessions held by Western Michigan and Boston College for teachers working with blind children and for certain agency personnel were not successful in producing contributing personnel to the field. Of the 50 trainees enrolled in such programs, only four remained as instructors (p.628)...

"The university training programs have become the primary means of articulating and delivering the body of knowledge that has come to be the core of the profession of orientation and mobility. The first programs were guided in curriculum development by the report of the 1959 Orientation and Mobility Symposium. Later programs following the model set by the the first programs as well as the suggested content of programs published as part of the COMSTAC Report... While individualized learning experiences under the blindfold, supervised teaching opportunities, and information about diseases of the eye seemed to be the most consistent parts of all of the programs; there were differences in the amount of background information provided and the course structure in which it was delivered... This was true among programs and within the same program over time. In the beginning, the programs tended to provide background knowledge in areas such as kinesiology, audiology, and psychology through courses in these subjects given by other university departments. Over the years, however, orientation and mobility faculty have taken on responsibility for providing the basic information in these areas through their own courses or seminars to make the content in these areas more relevant to the mobility specialists' needs. Material related to blindness and services for visually impaired persons was offered either as seminars or as courses. General professional information in education, rehabilitation, or social services was provided along with some background in research (pp. 629- 630).

"One reason why professionals come together in formal associations is to develop standards of education and training to insure that those entering the area of service are of high calibre by developing a method of identifying and recognizing those persons who have the necessary amount

and type of training. Orientation and mobility became involved in this process early in its history as a result of the widespread attention to accountability and certification issues current at the inception of the profession.

"The medical and the teaching professions were first to begin certifying that their members possessed certain personal and professional qualifications which made them particularly suitable for service as doctors or teachers respectively. Efforts to accredit institutions such as hospitals and schools often required that the professionals who staffed them met certain prescribed standards, usually those established by recognized professional organizations.

"Similar efforts to develop and upgrade standards appeared in the professions serving visually impaired people as early as 1940 when AAIB initiated a nation-wide certification program for teachers of the visually impaired. In 1943, AAWB launched a comparable certification program for teachers of the adult blind. Moving toward accreditation of agencies, AAWB, in 1954, adopted a code of ethics and began to award a seal of good practice to agencies operating within it. While commendable, the program lacked the organizational machinery and strength necessary to affect standards significantly in the field.

"Influenced by these precedents and increased concern for accountability, AFB, in October 1961, began a study 'to project the method, scope, and structure necessary to carry out an accreditation program in the field of work for the blind' (COMSTAC, 1966). The study recommended the formulation of standards for agency administration and service programs, and an organization to administer a nationwide system of voluntary accreditation based on them. From this the Commission on Standards and Accreditation of Services for the Blind (COMSTAC) was created. This study also initiated the process which led eventually to the development of standards and a process for certifying orientation and mobility specialists.

"COMSTAC appointed a Committee on Standards for Orientation and Mobility Services to conceptualize and express the role of these services in agencies and schools, the skills to be taught in relation to both cane and dog guide programs, the physical, personal, and professional qualifications of mobility specialists, and similar concerns. (The committee was composed of George Wentz, chairman, Donald Blasch, John Eichorn, Richard Hoover, William Johns, A. Ryrie Koch, Russell Williams, Louis Rives, McAllister Upshaw, and Arthur Dye).

"This Committee outlined principles for some of the program aspects of orientation and mobility services and standards for physical, personal, and professional qualifications for mobility specialists. These standards reflected most of the points made at the 1959 conference which led to the establishment of the initial university programs. Most notably, the standards called for the mobility specialist to have vision correctable to 20/20, no restrictions in visual field, and no evidence of visual pathology which would contribute to progressive deterioration. This strong insistence on good vision reflected the same concern of the 1959 conference that the mobility specialist had to be able to insure the client's safety during travel while distancing himself from the client physically. The other physical and personal standards called for normal hearing, good physical health, a personality capable of meeting the demands and stresses of the job, the ability to develop professional relationships, good observations skills, work organization skills, the ability to accept supervision, and a number of other characteristics.

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present. The author then goes on to discuss the various factors that have shaped the development of the United States, including the role of the government, the economy, and the culture. The paper concludes by suggesting that a study of the history of the United States is not only a valuable academic exercise, but also a necessary one for anyone who wishes to understand the world in which we live.

"The professional qualifications formulated by the committee also reflected back to the 1959 conference in that they called for graduation from an accredited graduate level program in orientation and mobility (pp. 633- 634).

"Two other issues germane to a discussion of standards and certification for mobility specialists need additional elaboration. These are the role of paraprofessionals and/or mobility aides in mobility services, and the certification needed by mobility specialists to work in public schools. The issue of paraprofessionals or mobility aides is confused by a lack of consistency in terminology. When these terms are used to indicate mobility instructors who are trained through programs conducted by agencies, the issue is clear. Such agency-trained instructors do not meet the criteria currently established for mobility specialists by the profession. On the other hand, there is a category of personnel variously referred to as mobility aides, paraprofessionals, and other titles, whose training and responsibilities are limited...

"Some mobility specialists have trained aides to assist them in some of the learning activities that precede formal mobility instruction, for example concept development, exposure to different environments, sensory training, and basic physical conditioning. Others have trained aides to provide instruction in basic skill areas such as sighted guide and protective techniques and indoor orientation skills... Obviously a point is reached where the duties and responsibilities of some workers called 'aides' parallel those of mobility specialists...

"... To attempt to prepare individuals whose educational qualifications did not have to exceed that of a high school diploma for this wide range of functions does not seem to consider the needs of the visually impaired clients for quality services. Such shortcuts to quality training are frequently justified by citing the needs of multiply handicapped blind persons and older blind persons. It seems, however, that these clients might require the skills of the most capably trained instructors rather than the services of minimally trained 'aides' (pp. 639- 640).

"Most discussions of the hallmarks of professions include the activities that guarantee society that its members will use their specialized knowledge in a way that will benefit people who must avail themselves of members' services. As certification became more firmly established, mobility specialists realized that it was insufficient to establish such a process without some mechanism to assure society that those who have entered the profession with the appropriate preparation also practice it in accord with acceptable and respected principles. In 1972 the Orientation and Mobility Interest Group appointed an ad hoc committee to investigate the feelings of the membership concerning the need for a code of ethics and to pull together some of the principles that might become a part of it.

"Under the chairmanship of William Wiener, the committee composed of Richard Welsh, Everett Hill, Robert LaDuke, Robert Mills, and Gerald Mundy examined codes of ethics of other professional organizations and considered the rationale for such a code. Once established, a code could benefit four groups of people. Clients would benefit from the existence of an explicit statement of what was considered acceptable practice in orientation and mobility. Such a statement could encourage and reinforce the type of service that reflected the worth and dignity of clients and

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their right to confidentiality, safety, objectivity, participation in decision making, and the highest quality services available. The community would benefit from having an explicit statement of the profession's intent to deliver services worthy of the investment and services that would be available to all members regardless of race, sex, age, severity of disability, or other characteristics. Administrators and employers could benefit from having a clear indication of what was considered acceptable practice in the profession against which they could evaluate the practice of their employees in mobility. The principles expressed in the code might also stimulate administrators to upgrade their mobility services when necessary.

"The code of ethics was also potentially of benefit to mobility specialists themselves. With a consensus statement of what was considered acceptable practice, the mobility specialist could operate in difficult situations with some assurance that his actions would be supported by his peers. Such assurance is particularly necessary today when malpractice is a concern in all professions. A code of ethics would provide a set of criteria against which disputed actions might be judged when claims of malpractice are brought against a mobility specialist. Such principles would protect the professional from having his actions evaluated against criteria formulated by an opposing party in a court of law as a result of a particular claim. In addition, mobility specialists would have some support when they have to resist pressure from employers to participate in actions that are outside the scope of acceptable practice. This step in the profession's development would also promote acceptance of mobility specialists among other disciplines which in turn can lead to greater and more effective teamwork and collaboration (p. 641).

"As in many other human service professions, there have more recently been efforts to develop entry level education programs at the undergraduate level. Part of the reasoning for these efforts in orientation and mobility is the expanding demands for the amount and type of knowledge that is becoming necessary for mobility specialists to acquire, particularly in the areas of low vision, electronics, geriatrics, multiple handicaps, and other disabilities. This is making it increasingly difficult for the one year graduate programs to include all of the information needed and still maintain the same amount of blindfold and supervised teaching experiences. Undergraduate programs would permit students who begin on this level to broaden their backgrounds and obtain additional knowledge in the expanding areas as they do their graduate studies.

"The continuation of two levels for entry into the orientation and mobility profession is desirable because it provides maximum flexibility in terms of attracting the variety of types of people who can contribute to the growth of the profession in various ways (p. 643)...

"A... critical issue concerns the growing involvement of many mobility specialists in low vision. More and more mobility specialists are finding themselves in situations where the best way to help their clients become more proficient travelers entails lessons designed to help them learn to use their remaining vision more efficiently. With some clients this involves vision stimulation; with others, work with low vision aids and other optical devices. For many it is a combination of both approaches. Perhaps mobility specialists are filling a temporary gap in services that will be filled by vision specialists as the need for this

type of direct instruction is more generally recognized. However, it may be that these changes in emphasis constitute a more fundamental and permanent change that will endure even as vision specialists such as ophthalmologists and optometrists respond to the new emphasis on low vision (p. 643).

"... [a] trend that has that has implications for the profession is the extension of mobility instruction to persons with other disabilities but who are not visually impaired... This trend has already begun and is gathering momentum. It is an idea that has the force of logic and is perceived by many as overdue. Reflecting these feelings, the Office Of Rehabilitation Service has funded the first university training program for mobility specialists to work with persons with all disabilities. It began at the University of Wisconsin at Madison under the direction of Bruce Blasch in 1978. Mobility specialists must consider how they are going to alter their training curricula, their certification criteria, and their identities to respond to this trend (p. 644).

"... [a] general challenge facing the profession concerns efforts to continue to upgrade the knowledge and skills of those who have already entered the profession. Most human service professions require members to demonstrate that they have continued to study and learn about their area of expertise... Unless provision for continuing education is established, there is a risk that the differences in preparation between those entering the profession and those practicing for several years will widen and have a negative effect on the standardization of services available for clients served by different mobility specialists (p. 644).

--Wiener, W. R., & Welsh, R. L. (1980). The profession of orientation and mobility. In Welsh, R. L., & Blasch, B. B. (Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, 625- 651.

"... we employed this external aid --the cane of unusual length-- and we employed it a lot, hour upon hour. I think if we averaged it out, it would probably be about 150 hours of time devoted to this with lots of repetition (p. 235)."

--Williams, R. C. (1972). "Background information." Orientation and mobility: A symposium. In Hardy, R. E., & Cull, J. G. (Eds.) Social and Rehabilitation Services for the Blind. Springfield, Illinois: Charles C. Thomas, 226- 264.

"[Orientation and mobility is] a key discipline in the rehabilitation and education of blind people. Although this discipline has faced much opposition and misunderstanding over the years it has endured and finally flourished.

"... Through the years a small number of dedicated people worked hard to give scientific validity to the art.

"From my ringside seat I had an exceptionally close view of how deeply effective orientation and mobility teaching is when it is taught by those who know what they are doing (p. v).

"Among other things, our work had to meet clinical recording standards of the hospital, by which what was done in orientation and

The first part of the paper discusses the importance of the study and the objectives of the research. It also mentions the scope of the study and the limitations.

The second part of the paper describes the methodology used in the study. It includes a detailed description of the data collection process and the statistical methods used for data analysis.

The third part of the paper presents the results of the study. It includes a detailed description of the findings and a discussion of the implications of the results.

The fourth part of the paper discusses the conclusions of the study and the recommendations for future research. It also mentions the limitations of the study and the need for further research.

The fifth part of the paper is a conclusion. It summarizes the main findings of the study and the implications of the results. It also mentions the limitations of the study and the need for further research.

The sixth part of the paper is a reference list. It includes a list of the references used in the study.

mobility began to find its way into the written word... It was thrilling to hear repeatedly from instructors reverberations of thoroughness, imagination, subtlety, and strong belief in the blinded persons with whom they worked. It was equally thrilling to get feedback from veterans that confirmed the meaningfulness of the program, as hopeless behavior and talk gave way to preoccupation with new vistas...

"... we had a remarkable record of retaining personnel, losing mainly those who were not up to the hard physical and emotional demands (and, I may add, peer discipline) that the unit required. Covering large areas on foot hour after hour, day after day, always in the right position to observe fine details of the blind person's performance is an exacting skill. The mere shadowing without inadvertently guiding is no mean achievement. It takes genuine emotional strength to teach and observe people who have uncommonly strong doubts about what you are teaching as well as their own ability to absorb it, and, in addition, to do this before an ever-present public who has stupendous doubts about the wisdom, safety, and validity of your efforts (p. vi).

"... It was my privilege to be a part of a renewal and revitalization of concern for the blind in the United States. The most important trait of this concern is that it is not merely mechanical. It pays deep attention to feeling and the spirit, as did the founding fathers in work for the blind (p. vii)."

--Williams, R. C. (1980). Preface. In Welsh, R. L., & Blasch, B. B.

(Eds.) Foundations of Orientation and Mobility. New York: American Foundation for the Blind, v- vii.

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CODE OF ETHICS FOR ORIENTATION AND MOBILITY SPECIALISTS

(Adopted by Interest Group #9 of the American Association of Workers for the Blind, July 1973 and by its successor, Association for Education & Rehabilitation of the Blind & Visually Impaired)

Preamble

Orientation and mobility specialists (peripatologists) recognize the significant role that independent movement plays in overall growth and functioning of the individual and are dedicated to helping each individual attain the level of independence necessary to reach his full potential. Orientation and mobility specialists gather, develop, and utilize specialized knowledge in accomplishing this goal. As with all professions, the possession of special knowledge obligates the practitioner to protect the rights of the individuals who must avail themselves of the particular service. To assure the public of our awareness of this obligation, we commit ourselves to this code of ethics.

In order to fulfill this obligation orientation and mobility specialists pledge themselves to standards of acceptable behavior in relation to the following five commitments:

Commitment to the Student; Commitment to the Community; Commitment to the Profession; Commitment to Colleagues and Other Professionals; Commitment to Professional Employment Practices.

It is the duty of each orientation and mobility specialist to adhere to the principles in the code and encourage his colleagues to do the same.

1. Commitment to the Student

1.1 The orientation and mobility specialist should value the worth and dignity of each individual.

1.2 It is the responsibility of the orientation and mobility specialist to strive at all times to maintain the highest standards of service by providing instruction in accord with procedures indicated in section S-3 of The Comstac Report and in accord with the physical, personal, and professional qualifications accepted as the criteria for certification by the O&M Division of AER.

1.3 The orientation and mobility specialist should take all reasonable precautions to insure the safety of his student and to protect him from conditions which interfere with learning.

1.4 The orientation and mobility specialist should respect the confidentiality of all information pertaining to the student. He must not divulge confidential information about the student to any individual not authorized by the student to receive such

information unless required by law or unless withholding such information would endanger the safety of the student or the public.

1.5 Before beginning lessons with the student, the orientation and mobility specialist should make every attempt to obtain and evaluate information about the student which is relevant to the orientation and mobility training.

1.6 The orientation and mobility specialist should respect the right of the student to participate in decisions regarding his training program.

1.7 Decisions regarding continuing or discontinuing training should be made with the student and should be based upon objective evaluation of the student's needs, abilities, and skills. These decisions should be made independent of personal or agency convenience.

1.8 The orientation and mobility specialist should provide sufficient information regarding the various types of orientation and mobility guidance devices and should explore with the student which device will best meet his needs.

1.9 The orientation and mobility specialist should seek the support and involvement of the family in promoting the student's training goals and in advancing his continued success. This should include sharing information with the family that will facilitate the student's welfare and independence, but not communicating information which violates the principles of confidentiality. The orientation and mobility specialist should not change training objectives upon suggestion of the student's family if the specialist's professional judgments would be compromised.

1.10 The orientation and mobility specialist should ask the consent of the student before inviting others to observe a lesson or before arranging to have the student photographed or tape recorded.

1.11 The orientation and mobility specialist should make all reports objective and should present only data relevant to the purposes of the evaluation and training. When appropriate, he should share this information with the student.

1.12 It is good practice to consult with another orientation and mobility specialist when assistance is required in evaluating students.

1.13 The orientation and mobility specialist should endeavor to provide all individuals involved with the students with sufficient knowledge, training and experiences relative to orientation and mobility so as to facilitate the goals of students.

1.14 The orientation and mobility specialist should not dispense or supply orientation and mobility equipment unless it is in the best interest of the student.

1.15 The orientation and mobility specialist should not allow consideration of his own personal comfort or convenience to interfere with the design and implementation of necessary travel lessons.

1.16 The orientation and mobility specialist should be responsible for services to students referred to him and should provide adequate ongoing supervision when any portion of the service is assigned to someone else. He should not assign to a less qualified person any service which requires the skill and judgment of the AER certified orientation and mobility specialist. Such duties or services may properly be assigned to interns or student teachers who are enrolled in orientation and mobility university programs with the understanding that each individual will function under strict supervision.

1.17 The orientation and mobility specialist should make every attempt to see that follow-up service is provided at the completion of training.

2. Commitment to the Community

2.1 The student should not be refused service by the orientation and mobility specialist because of age, sex, race, religion or national origin.

2.2 The student shall not be excluded from service because of the severity of his disabilities unless it is clearly evident that he cannot benefit from the service. The orientation and mobility specialist should attempt to influence decision making which establishes the rights of individuals to receive service.

2.3 The orientation and mobility specialist should contribute to community education by defining the role of orientation and mobility in the community, by describing the nature and delivery of service, and by indicating how the community can become involved in the educational and rehabilitation process.

2.4 The orientation and mobility specialist should not engage in any public education activity that results in exploitation of his students. Exaggeration, sensationalism, superficiality and other misleading activities are to be avoided.

2.5 The orientation and mobility specialist should strive to remedy those deficiencies in services that exist in the community.

2.6 The orientation and mobility specialist should encourage and participate in agency or school accreditation.

3. Commitment to the Profession

3.1 The orientation and mobility specialist should seek full responsibility for the exercise of professional judgment related to orientation and mobility.

3.2 To the best of his ability, the orientation and mobility specialist should accept the responsibility throughout his career to master and contribute to the growing body of specialized knowledge, concepts and skills which characterize orientation and mobility as a profession.

3.3 The orientation and mobility specialist should interpret and use the writing and

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research of others with integrity. In writing, making presentation, or conducting research, the orientation and mobility specialist should be familiar with and give recognition to previous work on the topic.

3.4 The orientation and mobility specialist should conduct his investigations in a manner which takes into consideration the welfare of the subject, and report research in a way as to lessen the possibility that his findings will be misleading.

3.5 The orientation and mobility specialist should strive to improve the quality of his service and promote conditions which attract suitable persons to careers in orientation and mobility.

3.6 The orientation and mobility specialist should, whenever possible, support and participate in local, state, and national professional organizations.

3.7 The orientation and mobility specialist should comply with professional practice in making known his availability for professional services.

3.8 The orientation and mobility specialist should accept no gratuities or gifts of significance over and above the predetermined salary or fee for professional service.

3.9 The orientation and mobility specialist should not engage in commercial activities which result in a conflict of interest between these activities and his professional objectives with the student.

3.10 The orientation and mobility specialist involved in development or promotion of orientation and mobility devices, books or other products, should present such products in a professional and factual way.

3.11 The orientation and mobility specialist should expose incompetence, illegal, or unethical behavior.

3.12 The orientation and mobility specialist should strive to provide fair treatment to all members of the profession and support them when unjustly accused or mistreated.

3.13 Each member of the profession has a personal and professional responsibility for supporting the orientation and mobility code of ethics and maintaining its effectiveness.

4. Commitment to Colleagues and Other Professionals

4.1 The orientation and mobility specialist should engage in professional relationships on a mature level and should not become involved in personal disparagement.

4.2 The orientation and mobility specialist should communicate fully and openly with his colleagues in the sharing of specialized knowledge, concepts, and skills.

4.3. The orientation and mobility specialist should not offer professional services

to a person receiving orientation and mobility instruction from another orientation and mobility specialist, except by agreement with the other specialist or after the other specialist has ended his work with the student.

4.4 When transferring a student, the orientation and mobility specialist should not commit a receiving specialist to a prescribed course of action. The receiving specialist should take the student's former training into consideration when developing a continue plan for training.

4.5 The orientation and mobility specialist should seek harmonious relations with members of other professions. This should include the discussion and free exchange of ideas regarding the overall welfare of the student and discussion with other professionals regarding the benefits to be obtained from orientation and mobility services.

4.6 The orientation and mobility specialist should not assume responsibilities which are better provided by other professionals who are available to the student.

4.7 The orientation and mobility specialist should seek to facilitate and enhance a team effort with other professionals. In such situations where team decisions are made, the orientation and mobility specialist should contribute information from his own particular perspective and should abide by the team decision unless the team decision requires that he act in violation of the code of ethics.

5. Commitment to Professional Employment Practices

5.1 The orientation and mobility specialist should apply for, accept, or offer a position on the basis of professional qualification and should conduct himself with integrity in these situations.

5.2 The orientation and mobility specialist should give prompt notification of any change of his availability to the agency or school where he has applied.

5.3 The orientation and mobility specialist seeking to hire other specialists should give prompt notification of change in the availability or nature of a position.

5.4 The orientation and mobility specialist should respond factually when requested to write a letter of recommendation for a colleague seeking a professional position.

5.5 The orientation and mobility specialist should provide applicants seeking information about a position with an honest description of the assignment, conditions of work, and related matters.

5.6 The orientation and mobility specialist should abide by the terms of a contract or agreement, whether verbal or written, unless the terms have been falsely represented or substantially changed by the other party.

5.7 The orientation and mobility specialist should not accept positions where

proven principles of orientation and mobility practice are compromised or abandoned, unless he accepts the position with the intention of amending or modifying the questionable practices and providing that he does not participate in the behavior which violates the code of ethics.

5.8 The orientation and mobility specialist should adhere to the policies and regulations of his employer except where they require him to violate ethical principles indicated in this code. To avoid possible conflicts, the orientation and mobility specialist should acquaint his employer with the contents of this code.

5.9 The orientation and mobility specialist who intends to resign from his position should give his employer sufficient advance notice and leave his work in such a way as to allow his successor to continue effective service.

5.10 The orientation and mobility specialist may provide additional professional service through private contracts, as long as these services remain of the highest quality and do not interfere with the specialist's regular job duties.

5.11 The orientation and mobility specialist should not accept remuneration for professional instruction from a student who is entitled to such instruction through an agency or school, unless the student, when fully informed of services available, decides to contract privately with the specialist.

5.12 The orientation and mobility specialist should establish a fee for private contracting in cooperation with the contracting agency or school that is consistent with the reasonable and customary rate of that particular geographic region.

5.13 When providing additional service through private contracts, the orientation and mobility specialist should observe the agency or school's policies and procedures concerning outside employment including the use of facilities.

--Wiener, W., Welsh, R., Hill, E., LaDuke, R., Mills, R.,
& Mundy, G. (undated).

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mobility task force:
report.

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